

The Economics of Federalism and the Proper Scope of the Federal Commerce Power

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The study of the economics of federalism has emerged as a distinct field. While the insights of that study have been applied in understanding the logic behind the dormant commerce clause, they have not been used in analyzing the affirmative scope of the federal commerce power. Mr. LeBoeuf suggests that the economics of federalism can provide both a justification for and a limitation upon the federal commerce power. Specifically, he suggests that the federal government ought to be able to regulate only those areas of commerce where state regulation would be inefficient due to externalities. Furthermore, he argues, this conception of federal power is both suggested by the evils that the commerce clause was designed to cure and consistent with the understanding of the framers.

INTRODUCTION

In recent years, a good deal of scholarly effort has been devoted to defining the contours of the theory of the economics of federalism. Although there have been a few contributions attributable to legal scholars, most of the labor has been expended by economists. As a result, the theory has been greatly refined, but it remains largely abstract, having rarely been applied to existing legal institutions or

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compared to the body of legal doctrines that has shaped the development of American federalism.

Recent years have also seen a resurgence of interest in the dormant commerce clause. Debate on the subject of whether the doctrine can lay claim to any textual or practical foundation remains spirited.¹ Even among commentators who agree that the doctrine has its proper place in the scheme of American federalism, controversy surrounds the definition of that role.

Comparatively little attention has been paid to the affirmative scope of the federal commerce power. Ever since the Supreme Court announced that it was no longer up to the task of enforcing limits on that power,² the whole area of inquiry seems to have become a dead letter. Although there have been a few notable exceptions,³ it appears that most commentators either agree with the Court's analysis or believe that the effort needed to criticize it could be more profitably expended elsewhere.⁴

The aim of this article is to tie together these three strands of reasoning. The effort is premised upon the supposition that insights from the study of the economics of federalism and from dormant commerce clause analysis may be used to understand the congressional commerce power. The analysis presented in this paper provides a means of justifying the exercise of that power while at the same time suggesting appropriate limits on it.

The thesis is that the exercise of federal commerce power is appropriate only where state regulation of commerce would be inefficient due to the presence of externalities. Federal regulation, in other words, is proper only where it is rendered necessary by the states' inability to regulate efficiently. This principle functions both as a justification for and as a limitation upon federal power.

Part I sets forth the basic position, developed in the economics of federalism, that interstate competition in the provision of public goods is generally salutary. Part II presents the exceptions to this general rule, all of which involve externalities. Part III refines the preceding treatment by examining the problem of externalities using the framework of the prisoner's dilemma. This Part suggests that, while state action that generates externalities may place the states in

1. See, e.g., Julian N. Eule, *Laying the Dormant Commerce Clause to Rest*, 91 YALE L.J. 425 (1982); Martin H. Relish & Shane V. Nugent, *The Dormant Commerce Clause and the Constitutional Balance of Federalism*, 1987 DUKE L.J. 569.

2. See *Garcia v. San Antonio Metro. Transit Auth.*, 469 U.S. 528 (1985).

3. See, e.g., Richard A. Epstein, *The Proper Scope of the Commerce Power*, 73 VA. L. REV. 1387 (1987); Vincent A. Cirillo & Jay W. Eisenhofer, *Reflections on the Congressional Commerce Power*, 60 TEMP. L.Q. 901 (1987).

4. See, e.g., Martin Shapiro, *American Federalism*, in CONSTITUTIONAL GOVERNMENT IN AMERICA 359, 361 (Ronald K.L. Collins ed., 1979) (noting dramatically that "the interstate commerce clause is deleted from the Constitution").

a prisoner's dilemma, the prisoner's dilemma model does not apply to state attempts to reallocate wealth entirely within the state. Part IV presents the original understanding of the commerce clause, and sets forth the proposition that the evils that the commerce clause was designed to remedy are precisely those described in Part II. Part V presents and responds to objections to the theory here proposed, concentrating in particular on the argument that courts are incapable of employing the economic analysis that application of the theory would require. This argument is met with the observation that courts have for over half a century utilized the same reasoning in the context of dormant commerce clause cases.

I. THE ADVANTAGES OF DECENTRALIZATION

There is a vast literature on the economics of federalism. This discourse has taken place almost entirely within the confines of the study of economics, and the theories that have been developed have rarely been applied to existing legal structures. Nonetheless, the bulk of the revelations yielded in the course of study of this body of literature are applicable to the American federal system.

Governmental decentralization has many advantages. Some of these advantages, which may be classified under the headings of responsiveness, competition, experimentation, and awareness of costs, are discussed in this Part. Such a system of government, however, also carries with it significant costs. These are discussed in the following Part. The aim of federalism, which connotes a system of government that is partially centralized and partially decentralized, is to take advantage of the benefits of centralization while avoiding its drawbacks.⁵ This is the fundamental premise of the study of the economics of federalism, and it will be shown to be a fair approximation of the motivating force behind the development of American federalism.

5. Alexis de Tocqueville observed that "[t]he federal system was created with the intention of combining the different advantages which result from the magnitude and the littleness of nations." ALEXIS DE TOCQUEVILLE, *DEMOCRACY IN AMERICA* (Phillips Bradley ed., 1945); see also WALLACE D. OATES, *FISCAL FEDERALISM* 3, 14 (William J. Baismol ed., 1972).

A. Responsiveness to Local Tastes and Conditions

One commonly cited advantage of decentralized government involves the gains flowing from responsiveness to local tastes and conditions. This aspect of decentralization was recognized by the framers, and modern legal scholars and economists agree that it is one of the greatest advantages of local government.

During the ratification debates, Richard Henry Lee, writing under the pseudonym "the Federal Farmer,"⁶ stated that "one government and general legislation alone, can never extend equal benefits to all parts of the United States: Different laws, customs, and opinions exist in the different states, which by a uniform system of laws would be unreasonably invaded."⁷ Another pamphleteer wrote that "[f]or being different societies, though blended together in legislation, and having as different interests; no uniform rule for the whole seems practicable."⁸ Alexis de Tocqueville later echoed this sentiment when he observed that "[i]n great centralized nations the legislator is obliged to give a character of uniformity to the laws, which does not always suit the diversity of customs and of districts."⁹

Modern economists recognize the value of diversity as the primary advantage of decentralized government. George Stigler recently noted that "a good political system adapts itself to the differing circumstances and mores of different localities"¹⁰ Another economist has observed that "[a] basic shortcoming of a unitary form of government is its probable insensitivity to varying preferences among

6. See PAMPHLETS ON THE CONSTITUTION OF THE UNITED STATES, 277 (Paul L. Ford ed., 1988) [hereinafter PAMPHLETS].

7. 2 THE COMPLETE ANTI-FEDERALIST 230 (Herbert J. Storing ed., 1981).

8. 5 *Id.* at 180. Tyler, speaking in the Virginia ratification debates, expressed similar sentiments: "So long as climate will have effect on men, so long will the different climates of the United States render us different. Therefore a consolidation is contrary to our nature, and can only be supported by an arbitrary government." 3 DEBATES OF THE SEVERAL STATE CONVENTIONS ON THE ADOPTION OF THE FEDERAL CONSTITUTION 639 (Jonathon Elliott ed., 2d ed. 1881) [hereinafter DEBATES].

9. DE TOCQUEVILLE, *supra* note 5, at 169; see also Letter from Edward Carrington to Thomas Jefferson, in 3 THE RECORDS OF THE FEDERAL CONVENTION OF 1787 at 38 (Max Farrand ed., 1911) [hereinafter THE RECORDS] (observing that "general Laws through a Country embracing so many climates, productions, and manners, as the United States, would operate many oppressions, & a general legislature would be found incompetent to the formation of local ones, as a majority would, in every instance, be ignorant of, and unaffected by the objects of legislation"); Letter from Samuel Adams to Richard Henry Lee, in 4 THE WRITINGS OF SAMUEL ADAMS 324 (Henry A. Cushing ed., 1907) (noting that it would be difficult, if not impossible, for one government to make laws for people "living in Climates so remote and whose 'Habits & particular Interests' are and probably always will be so different"). The pamphleteer Agrippa expressed similar sentiments when he observed that "[i]n large states the same principles of legislation will not apply to all the parts." 4 THE COMPLETE ANTI-FEDERALIST, *supra* note 7, at 76.

10. George Stigler, *Tenable Range of Functions of Local Government*, in JOINT ECONOMIC COMMITTEE, 85TH CONG., 1ST SESS., FEDERAL EXPENDITURE POLICY FOR ECONOMIC GROWTH AND STABILITY: PAPERS SUBMITTED BY PANELISTS APPEARING BEFORE THE SUBCOMMITTEE ON FISCAL POLICY 213, 213 (1957).

the residents of the different communities."¹¹

The principle is best illustrated with an example.¹² Imagine a body of 200 citizens governed by a unitary direct democracy. Suppose that 80 of the citizens smoke cigarettes, and that the remaining 120 deem this habit offensive. If a bill is proposed outlawing smoking, it will pass by 40 votes. The result will be 120 happy citizens and 80 unhappy ones.

Now imagine that the jurisdiction is divided into two parts of 100 citizens each, and that the citizens are prohibited from migrating between jurisdictions. Suppose that, of the 80 smokers, 55 ended up in part A. If the two newly created jurisdictions each vote on bills to outlaw smoking, the bill in part A will fail, while that in part B will pass. As a result, 55 smokers in part A and 75 non-smokers in part B will be happy, a total of 130.¹³ Division of the jurisdiction results in this case in the added happiness of ten citizens.

B. The Tiebout Model and Competition Among Jurisdictions

Another commonly discussed advantage of governmental decentralization is the inducement to subcentral jurisdictions to compete for citizens. This aspect of decentralization has attracted a great deal of attention since the publication of Tiebout's *A Pure Theory of Local Expenditures* in 1956.¹⁴ Professor Tiebout's aim in publishing this paper was to point out certain limitations on a theory that had

11. OATES, *supra* note 5, at 11; see also Donald H. Regan, *The Supreme Court and State Protectionism: Making Sense of the Dormant Commerce Clause*, 84 MICH. L. REV. 1091, 1177; Michael W. McConnell, *Federalism: Evaluating the Founder's Design*, 54 U. CHI. L. REV. 1484, 1493 (1987) (review of RAOUL BERGER, *FEDERALISM, THE FOUNDERS' DESIGN* (1987)); DAVID N. KING, *FISCAL TIERS: THE ECONOMICS OF MULTI-LEVEL GOVERNMENT* 20 (1984); Richard B. Collins, *Economic Union as a Constitutional Value*, 63 N.Y.U. L. REV. 43, 68 (1988). Another commentator has suggested that there may be a moral dimension to diversity. WILLIAM H. RIKER, *FEDERALISM: ORIGIN, OPERATION, SIGNIFICANCE* 145 (1964).

12. For discussion of similar examples, see ALBERT BRETON, *THE ECONOMIC THEORY OF REPRESENTATIVE GOVERNMENT* 114 (1974) and Bhajan S. Grewal, *Economic Criteria for the Assignment of Functions in a Federal System*, in ADVISORY COUNCIL FOR INTER-GOVERNMENTAL RELATIONS, *TOWARDS ADAPTIVE FEDERALISM* 1, 8 (1981).

13. Of course, if 40 smokers ended up in each jurisdiction, there would be no gains from decentralization. This result changes, however, if the assumption of no mobility is relaxed. See *infra* text accompanying note 18.

14. Charles M. Tiebout, *A Pure Theory of Local Expenditures*, 64 J. POL. ECON. 416 (1956).

been recently developed by Musgrave¹⁵ and Samuelson¹⁶ concerning what has come to be known as the preference revelation problem.¹⁷ Tiebout's famous insight was that, while unitary governments may have no means of determining their citizens' preferences for public goods, decentralized systems did. The necessary "market-type" preference-revelation mechanism was the citizens' ability to move freely among local jurisdictions. Tiebout pointed out that social welfare can be maximized by allowing citizens to choose from among a number of jurisdictions, each of which provides a different bundle of public goods.

The principal is once again best illustrated by an example. Recall that, in our earlier example, 45 non-smokers were left in A, where smoking remained legal, while 25 smokers got stuck in B, where it was made unlawful. Now imagine that we relax the assumption that citizens are not mobile. Assuming that there are no problems of congestion,¹⁸ the smokers and the nonsmokers will congregate, so that all 200 individuals will be happy.

This simple picture does not of course describe reality. In the example, there is only one policy choice facing citizens. Suppose instead that each jurisdiction may also raise a limited amount of funds through taxes, and that jurisdiction A decides to spend that money on the construction of a public swimming pool, while jurisdiction B spends it on the construction of a public library. Smokers in A, most of whom probably can't swim to save their lives, are now faced with a choice of being allowed to smoke or having free access to books.

Tiebout got around this difficulty by assuming that there was a

15. Richard A. Musgrave, *The Voluntary Exchange Theory of Public Economy*, 52 Q.J. ECON. 213 (1939); Richard A. Musgrave, *A Multiple Theory of the Budget* (paper read at the Econometric Society annual meeting, Dec., 1955); RICHARD A. MUSGRAVE, *THE THEORY OF PUBLIC FINANCE: A STUDY IN PUBLIC ECONOMY* (1959).

16. Paul A. Samuelson, *The Pure Theory of Public Expenditures*, 36 REV. ECON. & STAT. 387 (1954); Paul A. Samuelson, *Diagrammatic Exposition of a Pure Theory of Public Expenditures*, 37 REV. ECON. & STAT. 350 (1955).

17. See KING, *supra* note 11, at 29. The theory, as set out by Musgrave and Samuelson, was that while, in the traditional marketplace, consumers reveal their preferences for the various goods by their willingness or refusal to pay the going price, in the context of public goods, there is no market-type mechanism whereby consumers may reveal their preferences. (Of course, citizens may vote, but this mechanism is far from effective. In most Presidential elections, for instance, citizens are essentially constrained to voting for one of two enormous bundles of public goods, neither one of which necessarily approximates the desired bundle.) Furthermore, even if it were possible for each citizen to inform the government of his or her preferences and be taxed accordingly (a "benefits tax"), citizens would have an incentive to understate their true preferences and thereby free ride on the expenditure of taxes paid by others. Under such circumstances, it is virtually impossible for the government to provide an efficient level of public goods (if such a concept even has any meaning).

18. Congestion complicates the analysis by preventing individuals from moving or by permitting mobility but allowing mobile citizens to impose costs on the inhabitants of jurisdictions into which they move.

sufficient number of jurisdictions from which to choose so that one would exist that provided each individual's desired bundle of public goods. This was one of several highly artificial assumptions on which the theory was based.¹⁹ These assumptions, which have prompted much criticism of the thesis,²⁰ do not, however, detract from its essential point, which has come to dominate most thinking about the economics of federalism.²¹

A great deal of empirical research appears to support Tiebout's thesis. In numerous studies conducted over the course of more than twenty years, economists and sociologists have documented the impact of various government policies upon the migration patterns of demographic subsections of society.²² While most of this research dealt exclusively with the effects of purely redistributive policies,²³ the results nonetheless describe the Tiebout hypothesis in action, if only in a limited area.

C. Experimentation

One implication of the Tiebout hypothesis is that jurisdictions, in the competition to gain the tax dollars of residents and industry, will engage in valuable experimentation.²⁴ Just as competitive firms engage in experimentation and innovation in providing private goods, so too will competitive jurisdictions experiment with various methods of providing public goods. As more desirable techniques are discovered, more jurisdictions will follow the examples set by their successful counterparts.²⁵ This process should tend to produce more efficient

19. Other assumptions include full consumer information and mobility and an absence of interjurisdictional spillovers. Relaxation of the latter assumption is the focus of Part II.

20. Susan Rose-Ackerman, for example, has characterized the theory as "simply not very robust." Susan Rose-Ackerman, *Tiebout Models and the Competitive Ideal: An Essay on the Political Economy of Local Government*, in 1 PERSPECTIVES ON LOCAL PUBLIC FINANCE AND PUBLIC POLICY 23, 28 (1983).

21. As intimated in the introduction to this Part, relaxation of Tiebout's assumption is what economists studying the economics of federalism are largely concerned with. See, e.g., KING, *supra* note 11, at 20; Grewal, *supra* note 12, at 9.

22. For surveys of the literature, see Richard J. Cebula, *A Survey of the Literature on the Migration-Impact of State and Local Government Policies*, 34 PUB. FIN. 69 (1979); John J. Wallis & Wallace E. Oates, *Decentralization in the Public Sector: An Empirical Study of State and Local Government*, in FISCAL FEDERALISM: QUANTITATIVE STUDIES 5 (Harvey S. Rosen ed., 1988).

23. For a discussion of the obstacles faced by local governments attempting to engage in redistribution, see *infra* notes 91-101 and accompanying text.

24. See, e.g., OATES, *supra* note 5, at 12; Collins, *supra* note 11, at 68.

25. See Wallace E. Oates, *Decentralization of the Public Sector: An Overview*, in DECENTRALIZATION, LOCAL GOVERNMENTS AND MARKETS 43, 53 (R. Bennett ed.,

governing techniques everywhere.²⁶

The classic legal exposition of the advantage of experimentation was set forth by Justice Brandeis, dissenting from the Court's decision to strike down a state law on commerce clause grounds in *New State Ice Co. v. Liebman*.²⁷ Justice Brandeis wrote,

To stay experimentation in things social and economic is a grave responsibility. Denial of the right to experiment may be fraught with serious consequences to the Nation. It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.²⁸

Subcentral jurisdictions are better equipped to experiment because such experimentation is generally best carried out on a small scale.²⁹ Most national governments, however, cannot determine which sub-jurisdictions would prefer to attempt the experiment,³⁰ and are not usually equipped to treat different subjurisdictions differently. If the experiment involves, say, a different method of taxation, it would be difficult for a central authority to implement it in only one area.³¹ A central government attempting to do so would also be subject to the criticism that it was treating its citizens unfairly by differentiating between them.³²

The advantages of state experimentation are evident in America. When President Reagan, as part of his campaign to instill the values of federalism into the American consciousness, withdrew the federal government from several social programs, the states quickly occupied the field with a number of innovative techniques, including workfare programs and other incentive-based social welfare programs.³³

Techniques that prove successful in subcentral jurisdictions need

1990); OATES, *supra* note 5, at 12 (noting that if "public officials in one community have discovered a particularly effective way of providing a certain service, the governments of neighboring jurisdictions will, in all probability, be compelled to adopt similar techniques of production in order to avoid serious criticism from local residents"); Pierre Salmon, *The Logic of Pressure Groups and the Structure of the Public Sector*, 3 EUR. J. POLIT. ECON. 55 (1987) (describing mechanism behind local pressures on politicians to emulate successful neighbors).

26. But see Susan Rose-Ackerman, *Risk Taking and Reelection: Does Federalism Promote Innovation?*, 9 J. LEGAL STUD. 593 (1980) (suggesting that local politicians will be loath to experiment with social policies).

27. 285 U.S. 262 (1932).

28. *Id.* at 311 (Brandeis, J., dissenting). This sentiment was also a favorite of Justice Holmes. See, e.g., *Truax v. Corrigan*, 257 U.S. 312, 344 (1921) (Holmes, J., dissenting) (observing the phenomenon of "the making of social experiments that an important part of the community desires[] in the insulated chambers afforded by the several States . . .").

29. Note the practice of large private firms of test-marketing new products or services in highly localized communities.

30. KING, *supra* note 11, at 23.

31. *Id.*

32. *Id.* at 24.

33. See COMMISSION ON INTERGOVERNMENTAL RELATIONS, THE QUESTION OF

not be adopted only by other subcentral jurisdictions. One great advantage of such experimentation is the provision of valuable information to the central authority. This process has also been evident in the United States. For example, the national income tax program is said to have been based in part on the successful experiment, early in this century, of Wisconsin.³⁴ More recently, several national environmental statutes are said to have been based on similar legislation enacted in California.³⁵

D. Greater Awareness of the Social Costs of Legislation

An additional advantage of decentralized government is that it tends to promote efficiency by ensuring that those responsible for choosing a given social policy are made aware of the costs of that policy. As one economist has noted, "If a community is required to finance its own public program through local taxation, residents are more likely to weigh the benefit of the program against its actual costs."³⁶

The decisionmaking mechanisms employed in the national government are not generally conducive to this type of cost-benefit analysis. Because even major taxing and spending decisions in the federal government are usually made by elected representatives, and because those decisions are not usually directly tied to one another, citizens are not aware of, nor can they vote in accordance with, the costs and benefits of the decisions.³⁷

Local jurisdictions, however, often engage in detailed examination

STATE GOVERNMENT CAPABILITY 23-24 (1985) (noting that state governments have experimented with "sunset legislation, zero based budgeting, equal housing, no fault insurance . . . gun control, pregnancy benefits for working women, limited access highways, education for handicapped children, auto pollution standards and energy assistance for the poor"); see also Richard Nathan & Martha Derthick, *Reagan's Legacy: A New Liberalism among the States*, N.Y. TIMES, Dec. 18, 1987, at A39; Oates, *supra* note 25, at 53.

34. Oates, *supra* note 25, at 52; see also Edward Gramlich, *Federalism and Federal Deficit Reduction*, 40 NAT. TAX. J. 299, 309 (1987) (noting that "[o]ne argument for the decentralized approach is that states and localities can serve as laboratories for testing national policy changes").

35. Oates, *supra* note 25, at 52; see also Carol Kleiman, *States are Incubators for New Labor Laws*, CHI. TRIB., Apr. 12, 1992, § 8, at 1 (noting that many federal labor laws were based on earlier state legislation).

36. OATES, *supra* note 5, at 13.

37. See 3 THE RECORDS, *supra* note 9, at 38 (Letter from Edward Carrington) (observing that "a general legislature would be found incompetent to the formation of local [laws], as a majority would, in every instance, be ignorant of, and unaffected by the objects of legislation").

of the costs of proposed social programs. One example of this principle is the common practice of tying proposals to improve local educational services to increases in property taxes.³⁸ This practice both channels to the citizens information on the costs and benefits of proposed legislation and allows them to vote on it directly. Such a process provides an assurance, absent in the national legislature, that the benefits of proposed legislation will outweigh the costs.

E. Other Considerations

Decentralized government, in addition to providing the essentially economic advantages outlined in the preceding sections, leads to a number of more subtle but equally valuable benefits, which can be classified under the headings of accountability and participation.

First, decentralization is more conducive to greater accountability of elected officials, due to both geographical and numerical considerations. As the physical distance between the citizens and the seat of government increases, the accountability of elected officials drops. Although this advantage is of less concern today than it was two centuries ago, physical proximity nonetheless continues to promote some sort of psychic closeness between citizens and legislators.³⁹ Additionally, as the ratio of citizens to representatives falls, the citizens become more aware of the activities of their elected officials. The debates in the constitutional convention on the apportionment of representatives in Congress demonstrate the weight that the framers accorded this consideration.⁴⁰ The same reasoning applies to appointed as well as to elected officials.⁴¹ As government becomes more localized, elected officials exert increasing control over their appointees.

Another advantage of decentralized government is its tendency to promote liberty and to contribute to what Jefferson referred to as "civic virtue." According to the Jeffersonian ideal of republicanism, public affairs should be managed as much as possible at the local level so as to enable citizens to participate in a meaningful way.⁴²

38. See OATES, *supra* note 5, at 13; KING, *supra* note 11, at 23.

39. See THE FEDERALIST NO. 45, at 310 (James Madison) (Carl Van Doren ed., 1973):

The members of the legislative, executive, and judiciary departments of thirteen and more States, . . . with all the county, corporation, and town officers, . . . having particular acquaintance with every class and circle of people, must exceed, beyond all proportion, both in number and influence, those of every description who will be employed in the administration of the federal system.

Id.

40. See 1 THE RECORDS, *supra* note 9, at 559-88.

41. KING, *supra* note 11, at 23.

42. See HANNAH ARENDT, ON REVOLUTION 115 (1963) (noting that the Jeffersonians "knew that public freedom consisted in having a share in the public business, and that the activities connected with this business by no means constituted a burden but

George Stigler, in a paper presented to a Joint Economic Committee in 1957,⁴³ suggested that this was one of the primary advantages of localized government: "No one can doubt that the individual citizen gains greatly in political dignity and wisdom if he can participate in the political process beyond casting a vote periodically."⁴⁴

II. THE DISADVANTAGES OF DECENTRALIZATION

The foregoing Part set forth the basic proposition that competition among states is generally salutary and will in most cases lead to efficient results. The advantages of decentralization in the public sector are, however, offset by a number of disadvantages. Indeed, the bulk of the study of the economics of federalism is concerned with various methods of minimizing the effects of these disadvantages. This Part will briefly discuss one such problem, that of loss of economies of scale, and will then present a thorough discussion of another — the problem of externalities.

A. *Loss of Economies of Scale*

One of the disadvantages that accompanies decentralization involves the sacrifice of the economies of scale that often characterize governmental activity.⁴⁵ Many governmental activities are characterized by increasing returns to scale.⁴⁶ One example is the maintenance of a municipal landfill. It will not be efficient, in many

gave those who discharged them in public a feeling of happiness they could acquire nowhere else").

43. Stigler, *supra* note 10, at 213.

44. A related consideration is that which one economist refers to somewhat oxymoronically as "local nationalism." Grewal, *supra* note 12, at 10. Professor Grewal notes that "[p]eople derive significant psychological returns from belonging to a particular local community." *Id.*; see also G. Hartle & R. M. Bird, *The Demand for Local Political Autonomy: An Individualistic Theory*, 15 J. CONFLICT RESOL. (1971); Cliff Walsh, *Economic Aspects of Multi-Level Government and the Distribution of Fiscal Responsibilities*, in RESPONSIBILITY SHARING IN A FEDERAL SYSTEM 20 (R.L. Matthews ed., 1975). Anyone who has ever seen a confederate flag proudly displayed by a Southerner will vouch for the accuracy of the proposition that nationalist spirit exists at least within large regions.

45. Economies of scale exist in any industry characterized by decreasing marginal costs. This means that such economies will exist when, say, the first widget the firm produces costs ten dollars to produce, the second costs nine dollars, and so on (or, more likely, each succeeding widget, beyond a certain point, will cost, say, nine-tenths of the cost of the preceding one). In such cases, it is inefficient to prevent the firm from producing widgets until it has reached the lowest point on its cost curve. All of this is just another way of saying that duplication, in this context, is wasteful.

46. See KING, *supra* note 11, at 27.

instances, for small communities to provide their own garbage dumps. Another example, on a somewhat larger level, is the promulgation of standards of environmental pollution. Because such a process, in order to be efficient, requires the assembly of massive amounts of information regarding the environmental effects of various pollutants, once a single agency has undertaken such a task, any resources devoted to a similar endeavor by another agency are wasted.⁴⁷

The problem of loss of economies of scale is limited in several ways. First, the economies of scale associated with centralized provision of certain goods are often wildly exaggerated. Many governmental activities are, in fact, characterized by gross diseconomies of scale.⁴⁸ George Stigler has observed that most governmental activities that utilize complex technology, for example, could be more efficiently performed by small firms.⁴⁹

Second, the existence of economies of scale does not necessarily call for centralized provision of the goods or services at issue. The problem can be solved, in many instances, by a system of centralized production but decentralized provision. In our first example, it would not be necessary for central authorities to take over the business of garbage collection. The desired level of efficiency may be attained if county or regional authorities manage a large landfill, which is utilized, perhaps at a price, by local towns and cities.

Similarly, our second example does not necessarily call for centralized promulgation of environmental standards. The same efficiency could be attained by the establishment of a central clearinghouse for information on the effects of pollutants. Local communities desirous of promoting wise environmental policies could then obtain the necessary information from the central agency.⁵⁰

A thorough discussion of the problem of loss of economies of scale lies beyond the scope of this paper. The remainder of this Part will be devoted to discussion of what is the most problematic disadvantage of decentralized government: the problem of externalities.

47. The problem of economies is related to, but distinct from, that of public goods. Public goods are, in fact, characterized by infinite economies of scale, and this characteristic sets them apart. For a discussion of the problems associated with decentralized provision of public goods, see *infra* text accompanying notes 61-63.

48. See Richard A. Posner, *The Constitution as an Economic Document*, 56 GEO. WASH. L. REV. 4, 13 (1987) (noting the existence of "massive diseconomies of scale" in the national government).

49. Stigler, *supra* note 10, at 218.

50. RICHARD B. STEWART & JAMES E. KRIER, ENVIRONMENTAL LAW AND POLICY: READINGS, MATERIALS & NOTES 337 (2d ed. 1978) (suggesting that the federal role be "confined to directing state attention to air pollution problems [and] providing states with technical data which the federal government can generate more cheaply on a centralized basis").

B. Externalities

The problem of interjurisdictional spillovers was assumed away by Tiebout in his model of interjurisdictional competition,⁵¹ but it is a pervasive feature of reality. The classic definition of externality was set forth by A. C. Pigou in 1920.⁵² Externalities, according to Pigou, arise as follows:

[O]ne person A, in the course of rendering some service, for which payment is made, to a second person B, incidentally also renders services or disservices to other persons . . . of such a sort that payment cannot be exacted from the benefitted parties or compensation enforced on behalf of the injured parties.⁵³

Where externalities exist, private actors acting rationally cannot be counted on to promote the social good, as they can when all costs and benefits are internalized.⁵⁴ This gives rise to a common manner of stating the theory: Externalities exist whenever the private costs or benefits of an activity do not correspond to the social costs or benefits.⁵⁵

Although the classic definitions of externalities generally assumed that the actors making the production choices were private entities such as individuals or firms, the concept can be extended into the public sector. States and nations, in other words, confer benefits and impose costs on one another just as do private actors. Moreover, governments may prohibit, permit, or require private actors within their borders to impose costs or confer benefits upon citizens of neighboring jurisdictions.

Externalities can be either positive or negative. Activities that generate positive externalities will be undertaken in suboptimal amounts, while those that generate negative externalities will be undertaken in superoptimal amounts. In both cases, social wealth can be maximized by internalization of the costs and benefits. Each of these situations will be discussed below.

51. See *supra* note 19.

52. A.C. PIGOU, *THE ECONOMICS OF WELFARE* (1920).

53. *Id.* at 183.

54. *Id.* at 172 (stating that "[w]hen there is a divergence between [marginal private and social] net products, self-interest will not therefore tend to make the national dividend a maximum").

55. See, e.g., JOHN G. HEAD, *PUBLIC GOODS AND PUBLIC WELFARE* 190 (1974).

1. Positive Externalities

One classic example of a positive externality is a lighthouse.⁵⁶ Suppose that a harbor town is considering the installation of a lighthouse. The light would not be of much benefit to local fishermen, whose boats are almost always in the harbor by nightfall. It would, however, be of great worth to ships passing the harbor at night. Indeed, the benefit to the ships would far exceed the cost of installation. In such a case, assuming that there is no mechanism for collecting user fees from the cargo ships,⁵⁷ the town will not install the light, and the benefits that it could have provided will be foregone.

Most government-provided goods and services exhibit significant positive externalities. In the most extreme case, these goods may be characterized as pure public goods, which, according to Samuelson,⁵⁸ have two essential characteristics: nonrivalness⁵⁹ and nonexcludability.⁶⁰ The first characteristic means that the marginal cost of supplying the good to an additional consumer is zero. Once the good has been provided to one, it is available to all at no extra cost.⁶¹ The second characteristic means that the good cannot be withheld from anyone wishing to consume it; in other words, that the good exhibits positive externalities.⁶²

Rational local governments, like rational individuals, will produce public goods until the benefit of the good falling within the jurisdiction equals the marginal cost of supplying it. As the ratio of benefits

56. Use of a lighthouse as an example of a public good has acquired the patina of age and use. See, e.g., PAUL A. SAMUELSON, *ECONOMICS: AN INTRODUCTORY ANALYSIS* (6th ed. 1964); Grewal, *supra* note 12, at 5. Indeed, the prevalence of the practice has generated controversy over whether the old English lights were actually public goods. See, e.g., Ronald H. Coase, *The Lighthouse in Economics*, 17 J.L. & ECON. 357 (1974); David Van Zandt, "GOVERNMENT" OR "PRIVATE" PROVISION OF GOODS: THE LESSON OF THE LIGHTHOUSE (1992) (unpublished manuscript, on file with author).

57. This assumption has proved false at least with respect to English lights prior to this century. See Van Zandt, *supra* note 56.

58. Samuelson's theory of public goods was set forth in a series of three papers published in the late 1950s. See Paul A. Samuelson, *The Pure Theory of Public Expenditure*, 1954 REV. ECON. & STAT. 387; Paul A. Samuelson, *Diagrammatic Exposition of a Theory of Public Expenditure*, 1955 REV. ECON. & STAT. 350; Paul A. Samuelson, *Aspects of Public Expenditure Theories*, 1958 REV. ECON. & STAT. 332.

59. See KING, *supra* note 11, at 10. This characteristic is also referred to as "jointness of supply." See, e.g., HEAD, *supra* note 55, at 263. Samuelson himself used several equivalent methods of characterization. One defines a public good as each person's consumption that "is related to the total . . . by a condition of equality rather than of summation." Samuelson, *Diagrammatic Exposition*, *supra* note 58, at 350. Another definition is a good "which all enjoy in common in the sense that each individual's consumption of such a good leads to no subtraction from any other individual's consumption of that good." Samuelson, *The Pure Theory*, *supra* note 58, at 387.

60. See KING, *supra* note 11, at 10.

61. See, e.g., HEAD, *supra* note 55, at 263.

62. *Id.* Indeed, a pure public good cannot even be spurned by those wishing not to consume it. This gives rise to a third characteristic, nonrejectability.

falling outside the jurisdiction to those falling inside it increases, the community will produce decreasing amounts of the good, and the social gains attributable to production of the good will be increasingly foregone. At the limit, when all or virtually all of the benefits of the good fall outside the jurisdiction, the jurisdiction will not produce the good at all, and all of the potential gains will be foregone. This is the case with pure public goods.⁶³

National defense provides the classic example of a pure public good. A Stealth bomber, for instance, costs the same whether it is used in the defense of a small country or a large one. Furthermore, the protection offered by the bomber cannot be denied to anyone in the protected area. If the area to be protected is the nation, no state would have an incentive to provide the protection, and national defense would be undersupplied. Hamilton relied on this principle in arguing for national control of defense.⁶⁴

Not all public goods, however, are pure. There exist many "im-pure," or "local" public goods that, while they exhibit some externalities, may nonetheless be provided by subcentral jurisdictions, albeit at a suboptimal rate. Most, if not all, of the public goods provided by the states fall into this category. Consider, for instance, a public highway system. If all of the funds needed to construct a state highway had to be paid by state citizens, but if the highway could be used by citizens and non-citizens alike, free of charge, the state will

63. See HEAD, *supra* note 55, at 266 ("In a world polarized between pure public goods and pure private goods, it is therefore evident that multilevel government has no economic place."). But see Alan Williams, *The Optimal Provision of Public Goods in a System of Local Government*, 74 J. POL. ECON. 18 (1966) (suggesting that the complex interactions between jurisdictions make it impossible to predict, *a priori*, whether local public goods will be over- or under-provided). The problem is also referred to as one of imperfect mapping, meaning that the area responsible for providing the good does not correspond to the area benefitted. See, e.g., Albert Breton, *A Theory of Government Grants*, 31 CAN. J. ECON. & POL. SCI. 175, 182 (1965); Grewal, *supra* note 12, at 6.

64. ALEXANDER HAMILTON, THE FEDERALIST NO. 25 (Carl Van Doren ed., 1945). Economic stabilization, defined as the minimization of inflation and unemployment through the manipulation of monetary and fiscal policy, is another good example. See RICHARD A. MUSGRAVE, THE THEORY OF PUBLIC FINANCE 23 (1959); KING, *supra* note 11, at 6, 38; Grewal, *supra* note 12, at 50 (noting that it would be next to impossible for one state "to make itself an island of stability while the rest of the nation is suffering from economic fluctuations"). Stabilization is pure across subnational boundaries, and the increasingly interrelated nature of international financial relationships suggests that stability may soon become a public good that is pure on a global scale. Accordingly, the framers placed the tools necessary for implementation of stabilization policy — monetary and fiscal policy — squarely within the hands of the federal government, and the states are clearly prohibited from interfering in the exercise of this function. U.S. CONST. art. I, § 10, cl. 1 ("No State shall . . . coin Money; emit Bills of Credit; make any Thing but gold and silver Coin a Tender in Payment of Debts . . .").

construct the road, but it will dedicate a suboptimal amount of resources to its construction and maintenance. Assume, however, that the state decides to construct toll booths along the highway, and that state residents are given stickers entitling them to breeze unobstructed through the gates. Such a state may be able to recoup its costs, thereby enabling it to allocate the proper amount of resources to the maintenance of the road. Such a state may also, however, be able to impose costs on citizens of neighboring states in excess of the benefit from the highway. This leads us to the related problem of negative externalities.

2. *Negative Externalities*

The classic example of a negative externality is the smoke from a factory which sullies the drying laundry of nearby residents. In such a case, the factory owner, in selecting a level of production or of expenditure on pollution-abatement devices, will not take into account the costs imposed upon the neighbors. As a result, the factory owner will engage in more than the socially optimal level of pollution. As Pigou pointed out, social wealth may be maximized in such a case by forcing internalization of the external costs.

The difference between positive and negative externalities is in a sense purely semantic. The two concepts are really nothing more than two ways of looking at the same problem. As Coase pointed out,⁶⁵ the elimination of negative externalities will always involve the generation of positive externalities, and vice versa. In the example above, for instance, curtailment of production or installation of pollution-control devices would confer an external benefit on the neighbors of the factory.

Like positive externalities, negative externalities may exist both on a small, private scale and on a larger, public scale. In our example, one factory was located near a residential community. Suppose instead that a large group of factories was located on the upwind or upstream side of a state line. In such a case, the upwind state's failure to adopt airborne particulate emissions standards,⁶⁶ or the upstream state's failure to regulate effluent emissions,⁶⁷ would impose

65. Ronald H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960).

66. For a stark example of this scenario, see *Georgia v. Tennessee Copper Co.*, 206 U.S. 230 (1907). In that case, the state of Georgia sued to enjoin two copper smelters from discharging noxious gas into the air. The smelters were located within two and a half miles of the state line and were responsible for the discharge of 35 tons per day of poisonous sulphur dioxide, which precipitated in Georgia in the form of acid rain. *Georgia v. Tennessee Copper Co.*, 237 U.S. 474, 477 (1915).

67. An equally vivid example is *Missouri v. Illinois*, 200 U.S. 496 (1906). In that case, Missouri sued to enjoin the construction of a drainage channel. The project, which entailed the reversal of the flow of the Chicago River, resulted in the daily discharge of fifteen hundred tons of "poisonous filth" (raw sewage) into the Mississippi River at a

costs on the other state. Conversely, passage of such legislation would confer external benefits.

These illustrations suggest an important qualification on a state's ability to generate physical externalities. In both examples, the states responsible for the externalities had to be located upwind or upstream. The larger the ratio of the in-state effects of the pollution to out-of-state effects, the greater the internalization of the costs of the pollution, and hence of the benefits of regulation. If all of the pollution remains trapped within the state, the costs and benefits are completely internalized. This principle can be generalized to yield the proposition that a state's ability to export costs is limited by its ability to discriminate against out-of-staters.

Negative externalities need not involve the flow of matter from one jurisdiction to another. They can exist on a more abstract level. Recall, for instance, our earlier example of the state turnpike that allowed residents to pass but that required out-of-staters to pay a toll. The state in that example is exporting the costs of highway maintenance, just as a state that is a net emitter of pollution exports the costs associated with pollution. As a result, the state is forcing out-of-state drivers to subsidize the use of the road by residents.⁶⁸

Such exploitation has two main economic effects. First, it effects a wealth transfer from out-of-staters to residents. Second, it creates a deadweight loss to society, represented by the difference between the toll charged to outsiders and the social cost of use of the road by outsiders. To the extent that out-of-staters who would have been willing to pay the social cost of their use of the road are discouraged by the higher prices from using the road, society has lost.⁶⁹

As is the case with physical externalities, a state's ability to export costs is limited by its ability to discriminate against out-of-staters. In our turnpike example, the permit for residents provides an effective means of discrimination. The state in that example has succeeded in imposing all of the costs of the highway, and perhaps more, on out-

point 43 miles above St. Louis. *Missouri v. Illinois*, 180 U.S. 208 (1901).

68. See Ernest Brown, *The Open Economy: Justice Frankfurter and the Position of the Judiciary*, 67 *YALE L.J.* 219, 228-33 (1957); Regan, *supra* note 11, at 1191.

69. As Posner puts it:

When market price rises above the competitive level, consumers who continue to purchase the seller's product at the new, higher price suffer a loss exactly offset by the additional revenue that the sellers obtain at the higher price.

Those who stop buying the product suffer a loss not offset by any gain to the sellers. This is the "deadweight loss" from supracompetitive pricing.

Richard A. Posner, *The Social Costs of Monopoly and Regulation*, in *TOWARD A THEORY OF THE RENT-SEEKING SOCIETY* 71, 71 (James M. Buchanan et al. eds., 1980).

of-staters.

Few situations will be so clear, however. Suppose that the state was forced to charge all users of the highway the same fee. In such a case, the incidence of the tolls would be a function of the ratio of resident users to out-of-state users. The more residents use the highway relative to outsiders, the more the costs are internalized.

A state's ability to export costs is limited not only by its ability to discriminate against outsiders but also by the alternatives facing those outsiders.⁷⁰ Just as a firm's ability to engage in monopoly pricing is a function of the demand curve of consumers, so too a state's ability to price above marginal cost is a function of the demand curve of users. Where alternative goods or services are readily available, the demand curve facing the state will be nearly horizontal. In such a case, demand is said to be highly elastic, and a small increase in price will drive away a large number of consumers.

Suppose, in our example, that there are several alternate routes available to drivers, only one of which passes through the state that is considering erecting toll booths. In such a case, the elasticity of demand is high, and the tolls cannot be set much above marginal cost without driving away potential users. If, however, the state occupies a strategic position, and the highway is the only way of getting from one point to another, demand will be highly inelastic, and the state will be free to engage in monopoly pricing.⁷¹

States with geographical monopolies may export costs not only by levying fees upon things travelling through the state, but also by the more traditional method of charging monopoly prices for goods and services produced in-state and sold abroad. The state itself need not produce the good. A state that is the home of a large percentage of the producers of a good may impose heavy taxes on those producers, the bulk of which will ultimately be borne by out-of-state consumers. To the extent that the costs are borne by residents, they can be offset by lower levels of general taxes.

For instance, California, which produces nearly all of the raisins consumed in America, is well situated to engage in exploitation in the raisin market, and has done so in the past.⁷² Similarly, Montana,

70. See GEOFFREY BRENNAN & JAMES M. BUCHANAN, *THE POWER TO TAX: ANALYTICAL FOUNDATIONS OF A FISCAL CONSTITUTION* 169 (1980) (noting that "[t]he potentiality for shifting the burden of taxes from citizens to foreigners depends on the degree to which domestic demand and supply may be separated from foreign demand and supply and upon the relative elasticities of the relevant demand and supply functions").

71. See Collins, *supra* note 11, at 71; Saul Levmore, *Interstate Exploitation and Judicial Intervention*, 69 VA. L. REV. 563, 601 (1983); Alan Williams, *Severance Taxes and Federalism: The Role of the Supreme Court in Preserving a National Common Market for Energy Supplies*, 53 U. COLO. L. REV. 281, 290-95 (1981).

72. In *Parker v. Brown*, 317 U.S. 341 (1943), the Supreme Court upheld against

which has over 50 percent of the nation's low-sulphur coal reserves, extracted money from out-of-state consumers by imposing a thirty percent severance tax on the coal.⁷³ Many economists have observed that Florida exercises considerable market power in the market for sunshine, and takes advantage of this position by imposing heavy taxes on hotel rooms.⁷⁴ Economists have observed the same trend in a number of other industries.⁷⁵

3. *The Coase Theorem*

Concededly, the mere presence of externalities between states does not necessitate the interference of a higher level of government. Such problems might be resolved through bargaining.⁷⁶ This was the celebrated insight of Ronald Coase in *The Problem of Social Cost*.⁷⁷ Coase suggested that where, for example, a factory produces smoke that sullies the drying laundry of nearby residents, those residents have an incentive to bargain with the factory owner. If the costs imposed by the smoke outweigh the benefits created by the smoke-generating activity, the residents will pay the factory owner to cease production.

an antitrust challenge the California Agricultural Prorate Act, which established an intricate scheme for maintaining monopoly prices in the raisin market. For discussion of the case, see Collins, *supra* note 11, at 70; RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 602-04 (1972); Charles E. McLure, *Incidence Analysis and the Supreme Court: An Examination of Four Cases from the 1980 Term*, 1 SUP. CT. REV. 69, 74-80 (1982).

73. See *Commonwealth Edison Co. v. Montana*, 453 U.S. 609 (1981) (upholding the tax against a dormant commerce clause challenge).

74. The choice of a tax on hotel rooms is obviously designed to discriminate against out-of-staters, since state residents will seldom require in-state hotel rooms. See BRENNAN & BUCHANAN, *supra* note 70, at 170; Robert D. Tollison, Comment, in CONSTITUTIONAL ECONOMICS: CONTAINING THE ECONOMIC POWERS OF GOVERNMENT 55, 57 (Richard B. McKenzie ed., 1984); Michael T. Maloney et al., *Economic Regulation, Competitive Governments, and Specialized Resources*, 27 J.L. & ECON. 329, 337 (1984); T. M. Sandler & R. B. Shelton, *Fiscal Federalism, Spillovers and the Export of Taxes*, 25 KYKLOS 736 (1972); Charles E. McLure, *The Inter-regional Incidence of General Regional Taxes*, 24 PUB. FIN. 457 (1969).

75. New York, for example, is well situated to tax stock transactions. See *Boston Stock Exch. v. State Tax Comm'n*, 429 U.S. 318 (1977); Levmore, *supra* note 71, at 570-71; see also Tollison, *supra* note 74, at 57; BRENNAN & BUCHANAN, *supra* note 70, at 169; Maloney et al., *supra* note 74, at 337; Sandler & Shelton, *supra* note 74, at 743. See generally Charles E. McLure, *The Interstate Exporting of State and Local Taxes: Estimates for 1962*, 20 NAT'L TAX J. 49 (1967) (presenting empirical estimates of the extent of tax exportation in a given year).

76. See Edmund W. Kitch, *Regulation and the American Common Market*, in REGULATION, FEDERALISM, AND INTERSTATE COMMERCE 7, 13-14 (A. Dan Tarlock ed., 1981); Collins, *supra* note 11, at 124.

77. Coase, *supra* note 65.

There are a number of reasons why the Coase theorem does not provide an acceptable solution to the problem of interstate externalities. Foremost among them is the presence of insurmountable transaction costs.⁷⁸ It may have been possible, in other words, for two colonies to arrive at an acceptable solution in a dispute over the management of a river or harbor, but it will not be as easy for, say, eight eastern states troubled by acid rain to bargain successfully with the three midwestern states responsible for the problem.⁷⁹

The objection that the bargaining suggested by the Coase theorem would obviate federal intervention is in a sense nothing more than a dispute over semantics. Congress is, in a sense, the forum wherein states hammer out their differences. Although this conception of Congress lost a good deal of basis in reality with the adoption in 1913 of the seventeenth amendment,⁸⁰ the principle retains a certain amount of validity. Indeed, the Court has relied on just such a conception of Congress in refusing to enforce federalism-based limits on congressional authority.⁸¹

III. THE PRISONER'S DILEMMA AND THE RACE TO THE BOTTOM HYPOTHESIS

A. *The Prisoner's Dilemma*

One type of public good spillover merits separate treatment, and that involves the externalities that arise in a prisoner's dilemma. In a prisoner's dilemma, two or more players are constrained to impose costs, or at least fail to confer benefits, on one another. The concept of the prisoner's dilemma, though doubtless familiar to many readers, will be presented here.

In the classic version of the prisoner's dilemma,⁸² two recently arrested prisoners are interrogated separately following a robbery in

78. See Mancur Olson, Jr., *The Principle of "Fiscal Equivalence": The Division of Responsibilities Among Different Levels of Government*, 59 AM. ECON. REV. 479, 481 (1969) (observing that transaction costs among numerous citizens might be prohibitive).

79. The problem of transaction costs is aggravated by a number of factors. First, states attempting to bargain with one another are locked into a bilateral monopoly, with all of that situation's attendant problems. Second, where more than one state occupies one side of the bargaining table, there will be unavoidable free rider and holdout problems. Finally, states attempting to bargain away their differences would run headlong into the Constitution's requirement of Congressional approval of interstate compacts. U.S. CONST. art. I, § 10, cl. 3 (providing that "[n]o State shall . . . enter into any Agreement or Compact with another State . . ."); see also *id.* cl. 1 (providing that "[n]o State shall enter into any treaty, alliance, or Confederation . . .").

80. U.S. CONST. amend. XVII (providing for direct election of the Senate).

81. See, e.g., *Garcia v. San Antonio Metro. Transit Auth.*, 469 U.S. 528 (1985).

82. The prisoner's dilemma, whose name has been attributed to A.W. Tucker, was first developed around 1950 by Merrill Flood and Melvin Dresher. The concept of game theory, out of which the prisoner's dilemma grew, was developed around 1940 by John von Neumann and Oskar Morgenstern. RUSSELL HARDIN, *COLLECTIVE ACTION* 16

which the victim was badly injured. Each is told that, if he agrees to testify against his cohort, he will be convicted of the crime of possession of a firearm and sentenced to one year, while his counterpart will be convicted of attempted murder and sentenced to five years. Each prisoner is informed that the same proposition is being presented to his colleague, and that, if both decide to accept the prosecution's offer, both will be convicted of armed robbery and sentenced to four years. Finally, each prisoner knows that, if neither one of them agrees to testify, the government will be able to convict them only of simple robbery, for which they will each be sentenced to two years.

Each prisoner, then, is faced with a choice: cooperate with his cohort or defect. The results of the game can be displayed in a matrix, wherein prisoner 2's payoff is represented in the lower left-hand corner of each cell.

		Prisoner 1	
		Cooperate	Defect
Prisoner 2	Cooperate	2 2	1 5
	Defect	5 1	4 4

An examination of the payoff matrix yields two important insights. First, the best thing for the prisoners as a pair to do is cooperate with one another. If both prisoners cooperate, they receive a total of four years' prison time. If one defects, the total rises to six years, and if both defect, it rises to eight.

The second unique aspect of the payoff matrix is that each prisoner, acting rationally, is constrained to doom the pair. No matter what the other prisoner decides to do, it is always in the individual interest of each prisoner to defect. This means that, in the language

(1982). The prisoner's dilemma was further refined by Mancur Olson and Russell Hardin. MANCUR OLSON, *THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS* (1965).

of game theoreticians, the strategy of defection is "dominant."⁸³ It is also "stable," meaning that, if the same two prisoners were to find themselves confronted repeatedly with the same situation, neither one would, in the absence of a mechanism whereby the two could communicate to one another their desire to cooperate, have any incentive to switch to the other strategy. The prisoner's dilemma is unique among games in that it has a single, stable, non-Pareto efficient equilibrium.⁸⁴

Pareto efficiency is a basic concept in economics. A state of affairs *A* is Pareto superior to a state *B* if someone in *B* could be made better off by moving to *A* and no one would be made worse off. If, for example, the world consisted of two individuals, *X* and *Y*, then a state of affairs in which *X* had two apples and *Y* had one would be Pareto superior to one in which *X* and *Y* had an apple apiece. A state of affairs is said to be Pareto efficient if there exists no state of affairs that is Pareto superior: that is, if there is no way to make someone better off without making anyone worse off.

Another useful concept is that of Kaldor-Hicks efficiency. A state of affairs *A* is said to be Kaldor-Hicks superior to a state *B* if the total wealth is higher. A given individual may be made worse off in the move to a Kaldor-Hicks superior state of affairs, but it must be the case that the benefits resulting from the move outweigh the costs. A common way of phrasing the concept is that a state of affairs is Kaldor-Hicks superior if the parties benefitted are able to compensate the parties harmed, with something left over.

As noted above, the prisoner's dilemma is a game that results in a stable, non-Pareto efficient outcome. The outcome is non-Pareto efficient because all players can be made better off by agreeing to cooperate. This can be demonstrated in the context of physical externalities. Imagine a world divided into two states that are somehow prevented from cooperating with one another. State *A* is upwind from state *B*, and the smoke from *A*'s factories sullies the laundry of *B*'s residents. State *B*, on the other hand, is uphill from state *A*, and effluents flowing from *B*'s factories pollute the drinking water of *A*'s residents.

If neither state takes into account the external costs of their respective industries, they are in a classic prisoner's dilemma. Each state would be made better off if both states were forced to internalize costs, because both states would then consider the true social cost of pollution in selecting levels of pollution control. Internalization, in other words, would be Pareto efficient.

83. See HARDIN, *supra* note 82, at 24.

84. Of the 78 strategically distinguishable games catalogued by game theoreticians Anatol Rapoport and Melvin Guyer, the prisoner's dilemma proved to be the only one fitting this description. HARDIN, *supra* note 82, at 28.

Suppose, however, that the external costs imposed by *A*'s factories greatly outweigh those imposed by *B*'s. *A* is, in other words, a net exporter of costs. Such a case is not a classic prisoner's dilemma, because internalization will make *A* worse off. The unregulated state of affairs is Pareto efficient, because there is no way to make anyone better off without making someone worse off. It is not, however, Kaldor-Hicks efficient, because the reallocation of resources that would result from the internalization of costs would make society better off. This state results in what I call a modified prisoner's dilemma, where the payoff matrix is as follows:⁸⁵

		Prisoner 1	
		Cooperate	Defect
Prisoner 2	Cooperate	4 2	1 8
	Defect	6 1	2 6

In this matrix, Prisoner 1 represents State *A*, the net exporter of costs. While society as a whole is benefitted by internalization (the northwest cell totals to less than the southeast), Prisoner 1 is actually made worse off. Because Prisoner 1's loss is more than offset by Prisoner 2's gain, however, cooperation in the modified prisoner's dilemma represents a move to a Kaldor-Hicks superior position.

It should be apparent that externalities are the essential characteristic of both the original and the modified prisoner's dilemmas. The essence of the dilemma is that each prisoner imposes costs on the other, costs that the prisoner does not consider when selecting a course of action. In the original version, each prisoner imposes the same costs on the other, while, in the modified dilemma, the costs are skewed. In either case the prisoners have a disincentive to unilaterally select a course of action that would benefit the pair.

85. I have retained in this payoff matrix the supposition that the numbers represent prison years, or costs of some sort, so that the lower the payoff, the better off the player.

When the problem is phrased in the manner of the preceding sentence, yet another equivalence should spring to mind, and that is the equivalence between the prisoner's dilemma and the public good. Cooperation in the prisoner's dilemma is a public good, one that no prisoner has an incentive to supply. The same concept can also be phrased in terms of the problem of collective action⁸⁶ or the tragedy of the commons.⁸⁷

B. The Race to the Bottom Hypothesis

It is often suggested that, under certain circumstances, the prisoner's dilemma prevents states from enacting desired policies. Theorists have suggested that a number of areas can be characterized by this race to the bottom. Accordingly, federal intervention has been proposed as a method of ensuring cooperation in these areas.

Generally, the policies that fall into this category are claimed to have certain characteristics. Although it is seldom phrased in these terms, it is generally claimed that the policies will result in outcomes that are Kaldor-Hicks superior, but Pareto inferior to the pre-existing states. An alternative manner of characterizing such statutes is that they are alleged to have both allocational⁸⁸ and redistributive effects.⁸⁹ Proponents of federal intervention claim that states are prevented from enacting statutes that would result in net gains to society by the fear that the groups injured by the redistributive effects of the legislation will flee the jurisdiction.

The solution in such cases is not federal intervention but unraveling the two strands. Any allocational legislation which generates undesirable redistributive effects can be coupled with a redistributive statute designed to offset those effects. If the statute would truly result in a Kaldor-Hicks superior state of affairs, there will exist some way of forcing those benefitted to compensate those injured, with something left over.

If the state refuses to enact the offsetting redistributive legislation, it can only be because the state desires to retain the redistributive effects of the proposed legislation. The true objective of the statute, in other words, is redistributive. A state in such a position, requesting federal intervention, is doing so, not to enable it to enact presumably wealth-generating allocational legislation, but to enable it to coerce its citizens into participating in a redistributive scheme.

86. See HARDIN, *supra* note 82; OLSON, *supra* note 82.

87. See, e.g., Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347 (1967).

88. By allocational effects I mean that the policies are designed to move resources to higher valued uses, thus resulting in greater social wealth.

89. By redistributive effects I mean that the policies shift wealth between groups.

Whether federal intervention is justified in such a situation is discussed below.

All of this is not to say that the prisoner's dilemma model has no applicability to the situation existing between states. As noted above,⁹⁰ situations may exist wherein states are imposing costs on one another. These costs may take the form of physical pollutants or tax exportation. In either case, all, or at least most, states could be made better off by forced internalization of costs.

The prisoner's dilemma hypothesis has been advanced as a justification for federal intervention in each of the examples that follow. In some of these cases it is clear that unregulated states will impose costs on one another. These cases qualify as true prisoner's dilemmas, or at least as modified prisoner's dilemmas. In others, however, federal intervention is sought to be justified on the grounds that states cannot enact legislation leading to Kaldor-Hicks superior states. In these cases, the prisoner's dilemma is a chimera, and federal intervention cannot be justified using this model. It will be shown that the race to the bottom, in other words, can exist only in the presence of external costs or benefits.

C. Illustrations

1. Redistribution

It is generally accepted by economists that redistributive policies cannot be successfully carried out locally.⁹¹ The reason is obvious: the government's ability to take from one citizen in order to give to another can succeed only through the threat of coercion. That threat will not be forthcoming if the citizen is free to move to another jurisdiction. Thus, redistribution can only be carried out where citizens are restricted geographically. Since that restriction exists only at the national level, redistribution can only be carried out by the national government.

Additionally, generous redistributive schemes will tend to attract potential recipients. The new applicants for public aid will then drive

90. See *supra* notes 66-67 and accompanying text.

91. See, e.g., ANTHONY B. ATKINSON & JOSEPH E. STIGLITZ, LECTURES ON PUBLIC ECONOMICS 552 (1980); Grewal, *supra* note 12, at 27 (noting that there is a "fairly strong consensus" that redistribution must be carried out by the national government); KING, *supra* note 11, at 6, 33; James M. Buchanan, *Who Should Distribute What in a Federal System*, in REDISTRIBUTION THROUGH PUBLIC CHOICE 22 (Harold M. Hochman & George E. Peterson eds., 1974).

down the average level of payments. The result is that local communities will not be able to maintain the high standards to which they initially aspired, and will be discouraged from attempting to implement generous plans in the first place.⁹² These two considerations have led most scholars to conclude that such redistributive measures place the states in a prisoner's dilemma, and that the only possible solution involves federal intervention.⁹³

This argument has been criticized on a number of grounds. First, it has been observed that the mobility of citizens is less than perfect.⁹⁴ Residents' capacities to leave jurisdictions are limited by substantial moving costs, psychological connections to geographic areas, and many other factors.⁹⁵ Thus, local communities are in a position to impose redistributional costs on their citizens up to the point at which those costs are equal to the sum of the costs of moving.⁹⁶

Second, some scholars have suggested that redistribution need not be premised on coercion.⁹⁷ Proponents of this view point out that many people derive great benefit from donating to charity. As a corollary to this line of argument, it has been observed that, among people who derive significant pleasure from giving their money away, pleasure increases as the results of the gifts become more apparent.⁹⁸ This leads to the conclusion that the benefits derived from redistribution decrease as the geographic area over which the redistribution is affected increases. Thus, redistribution should be carried out locally.

While these criticisms carry a certain amount of weight, it cannot be denied that jurisdictions embarking on large-scale redistributional campaigns will encounter difficulties. This is particularly true when the proposed sources of funds are industries, which assess the costs and benefits of proposed moves without regard to nonmonetary concerns.⁹⁹ Many commentators have taken this to indicate that the

92. This principle was evident in the early 1980s when the city of Berkeley announced a generous new plan to deal with the city's homeless. The city was quickly overrun by indigents from across the country, and was forced to reevaluate its policy. The same principle was also recognized in colonial America. This recognition manifested itself in the inclusion, in the privileges and immunities clause contained in the fourth Article of Confederation, of an exception for paupers and vagabonds.

93. See, e.g., Charles E. McLure, *Tax Competition: Is What's Good for the Private Goose Also Good for the Public Gander?*, 39 NAT'L TAX J. 341, 346 (1986).

94. See Grewal, *supra* note 12, at 28.

95. See L. F. Dunn, *Measuring the Value of Community*, 6 J. URB. ECON. 371 (1979).

96. It is, after all, intuitively plausible that many people will tolerate a small increase in the level of state income taxes used to finance redistributive programs rather than move to another state. This view is borne out by the existence of redistributive programs in most states, such as progressive income tax structures.

97. See, e.g., Grewal, *supra* note 12, at 28.

98. *Id.* at 29; Mark V. Pauly, *Income Redistribution as a Local Public Good*, 2 J. PUB. ECON. 37 (1973).

99. This is consistent with observations of the flight of industry to low-tax states in the 1980s.

states are in a prisoner's dilemma, and that federal intervention will benefit all states. This argument rests on a conception of the term "benefit," however, that is at odds with the understanding of that term utilized by economists, and with the term as used in connection with the prisoner's dilemma.

Redistributional statutes, unlike allocational statutes, do not create wealth, but merely shift it around. Indeed, there are good arguments to suggest that such statutes destroy wealth, through rent-seeking, bureaucratic inefficiencies, and the destruction of incentive effects. Consequently, redistributive statutes can never produce results that are either Kaldor-Hicks or Pareto superior to the pre-existing states.¹⁰⁰ This same analysis applies between states just as it applies between individuals: If no one state can be made better off by redistributing among its citizens, then no group of states can be made better off by the existence of redistributive statutes.

The failure of redistributive measures at the state level is due also to the difficulty of obscuring the costs of such statutes. Since, as noted above,¹⁰¹ the costs and benefits of legislation are generally more apparent at the state level, states will not be able to enact legislation unless the benefits of the legislation exceed its costs. At the federal level, however, the wealth effects of legislation can be readily obscured.

Redistribution, and thus the federal coercive power needed to carry it out on a large scale, may of course be justified by some other theory. It cannot, however, be justified by the race to the bottom theory.

100. Concededly, if the analysis were cast in terms of an attempt to maximize "utils" rather than dollars, one might argue that redistribution can result in the creation of wealth. In other words, if the recipient derives more utility from the transferred wealth than did its original owner, the overall level of utility would be increased. This analysis, however, depends for its force on interpersonal comparisons of utility undertaken in the absence of any method of measurement. Since, in other words, the only sure way to determine how much utility a person derives from a good is to find out what that person is willing to give away in order to get it, then it cannot be asserted that one individual derives more utility from a given good than does another individual unless that individual is asked to pay for it.

All of this is simply a roundabout way of stating that redistribution can never be justified on any economic theory. The larger debate, on whether it can be justified at all, lies beyond the scope of this paper.

101. See *supra* text accompanying notes 36-38.

2. Corporation Law

In 1974, Professor William Cary wrote an article suggesting that state attempts to attract corporate charters resulted in a competitive race to the bottom which necessitated federal intervention.¹⁰² Professor Cary argued that, since the selection of a state of incorporation (or reincorporation) is in the hands of a corporation's managers, officers and directors, states wishing to secure franchise fees will conform their corporation laws to the wishes of those parties, and will neglect the interests of the shareholders. Since there is no *a priori* reason to believe that the shareholders will be residents of the state of incorporation, the effect of the corporate laws enacted by such a state will be to exploit out-of-state shareholders to the benefit of the officers and directors, and, indirectly, the state's coffers and tax-paying citizens, who will pay lower taxes on account of the offsetting incoming revenue. The result, said Cary, was a competitive race to the bottom, a race in which, to date, Delaware has been the hands-down front-runner.¹⁰³

The race to the bottom theory in corporation law has also taken hold in the European Economic Community, where such an eventuality has recently been made possible by the ongoing harmonization movement.¹⁰⁴ As a result of several directives issued by the European Commission,¹⁰⁵ European companies are for the first time in a position to select countries in which to reincorporate.¹⁰⁶ Many commentators have expressed concern that the competition enabled by

102. William L. Cary, *Federalism and Corporate Law: Reflections upon Delaware*, 83 YALE L.J. 663 (1974). The thesis touched off a debate that still rages. See, e.g., Roberta Romano, *The State Competition Debate in Corporate Law*, 8 CARDOZO L. REV. 709, 709 (1987) (noting that "[a] perennial issue in corporate law reform is the desirability of a federal system"). Many commentators, however, believe that the premise of Cary's thesis has been largely discredited. See, e.g., Ralph K. Winter, Jr., *State Law, Shareholder Protection, and the Theory of the Corporation*, 6 J. LEGAL STUD. 251 (1977); FRANK H. EASTERBROOK & DANIEL R. FISCHEL, *THE ECONOMIC STRUCTURE OF CORPORATE LAW* 213 (1991); Daniel R. Fischel, *The "Race to the Bottom" Revisited: Reflections on Recent Developments in Delaware's Corporation Law*, 76 NW. U. L. REV. 913, 920 (1982); Romano, *supra*, at 711.

103. Cary, *supra* note 102, at 666.

104. Until recently, legal barriers within Europe prevented corporations located there from moving freely about. See Clark D. Stith, *Federalism and Company Law: A "Race to the Bottom" in the European Community*, 79 GEO. L.J. 1581, 1585 (1991).

105. The Commission was established pursuant to the Treaty Establishing the European Economic Community (Treaty of Rome), Mar. 25, 1957, 298 U.N.T.S. 11. For examples of directives aimed at harmonization, see, e.g., First Council Directive, 1968 (I) O.J. Eur. Comm. (No. L 65) 41 (special ed.) (adopting uniform disclosure requirements); Second Council Directive, 20 O.J. Eur. Comm. (No. L 26) 1 (1977) (adopting minimum capital requirements); Third Council Directive, 21 O.J. Eur. Comm. (No. L 295) 36 (1978) (adopting merger regulations); Fourth Council Directive, 21 O.J. Eur. Comm. (No. L 222) 11 (1978) (adopting uniform accounting principles).

106. See Stith, *supra* note 104, at 1585.

harmonization may lead to an undesirable race to the bottom.¹⁰⁷

This thesis is subject to one devastating critique: Cary's argument completely failed to consider the leverage wielded by shareholders. Easterbrook and Fischel state the rejoinder quite succinctly:

Entrepreneurs must compete for capital To attract investment, therefore, entrepreneurs choosing a state of incorporation will search for legal rules that maximize investor's welfare. Managers cannot exploit investors they cannot attract. Thus states, to compete for the revenue produced by incorporations, must adopt rules that are in the interest of investors.¹⁰⁸

This critique has been set forth in detail by Ralph Winter.¹⁰⁹ Professor Winter explained that, since share values are a function of earnings, a company choosing to reincorporate in a state whose laws would result in a diminution of those earnings would experience a drop in share prices. This would in turn render management vulnerable to a takeover, because an investor could profit by seizing control of the firm and reincorporating it in a state where its value would be maximized.¹¹⁰ Empirical findings appear to support Winter's thesis.¹¹¹

3. Tort Law

The last three decades have seen an explosion in tort liability, particularly in the area of products liability. This development has become an increasingly popular topic for commentators,¹¹² some of whom explain it as the result of a race to the bottom.¹¹³ Under this theory, a state's maintenance of a system of tort law that is unduly generous to plaintiffs creates negative externalities.

107. See, e.g., *id.*

108. EASTERBROOK & FISCHEL, *supra* note 102, at 213.

109. Winter, *supra* note 102.

110. *Id.* at 255; see also McConnell, *supra* note 11, at 1499.

111. Several studies have demonstrated that the share prices of firms reincorporating in Delaware tend to rise in response to the move. See Peter Dodd & Richard Leftwich, *The Market for Corporate Charters: "Unhealthy Competition" versus Federal Regulation*, 53 J. BUS. 259 (1980); Roberta Romano, *Law as a Product: Some Pieces of the Incorporation Puzzle*, 1 J.L. ECON. & ORGANIZATION 225, 273 (1985).

112. See, e.g., RICHARD NEELY, *THE PRODUCT LIABILITY MESS: HOW BUSINESS CAN BE RESCUED FROM THE POLITICS OF STATE COURTS* 9 (1988) (noting that, since the early 1960s, product liability law "has evolved into an increasingly prominent hazard for American business"); George L. Priest, *The Current Insurance Crisis and Modern Tort Law*, 96 YALE L.J. 1521 (1987) (describing the state of the law and attributing it to a desire to render tort law a system of third-party insurance).

113. See NEELY, *supra* note 112; David A. Rice, *Product Quality Laws and the Economics of Federalism*, 65 B.U. L. REV. 1 (1985); Michael W. McConnell, *A Choice of Law Approach to Products Liability Reform*, in *NEW DIRECTIONS IN LIABILITY LAW* (Walter Olson ed., 1988).

Proponents of this theory begin by pointing out that plaintiffs in product liability cases and other tort actions will generally attempt to bring suit in the courts of their own state, where the actions will remain unless the defendants can remove them. As a result, the vast majority of plaintiffs in state courts will be state citizens. The defendants, on the other hand, will often be citizens of other states.¹¹⁴ Even when the nominal defendant is a local resident, the party who will bear the brunt of any judgment is often a national insurance carrier.¹¹⁵ Moreover, the finder of fact will in most cases be a jury comprised of residents of the forum state, whose sensitivities will naturally be aligned with the in-state plaintiff.¹¹⁶ Appellate judges cannot be counted on to check the passions of juries, because they are subject to the same pressures.¹¹⁷

This theory is persuasive. The maintenance of a tort system that

114. As a result of the Supreme Court's extension of state courts' in personam jurisdiction over non-resident defendants in *International Shoe Co. v. Washington*, 316 U.S. 310 (1945), out-of-state defendants must now be prepared to be haled into state court whenever their activities within that state make it "reasonable" to expect it. *Id.* at 317. This is the "minimum contacts" test. *See, e.g.,* *Burger King, Inc. v. Rudzewicz*, 471 U.S. 462, 474 (1985) (citing *International Shoe* in support of the proposition that "the constitutional touchstone remains whether the defendant purposefully established 'minimum contacts' in the forum State"). State courts have interpreted this test expansively, finding jurisdiction based on the most seemingly tenuous connections. *See, e.g.,* *Gray v. American Radiator & Standard Sanitary Corp.*, 22 Ill. 2d 432, 442, 176 N.E.2d 761, 766 (1961) (basing jurisdiction on the defendant's having received the benefit of the protection that state law had given to "the marketing of hot water heaters containing its valves"); *Buckeye Boiler Co. v. Superior Court*, 71 Cal. 2d 893, 458 P.2d 57, 80 Cal. Rptr. 113 (1969) (finding jurisdiction despite mystery over the manner in which the defendant's boiler found its way into the state). In addition, many states have enacted what have come to be known as long-arm statutes, thereby giving their courts the jurisdiction that the minimum contacts test permits. *E.g.,* CAL. CIV. PROC. CODE § 410.10 (West 1973); ILL. ANN. STAT. ch. 110, para. 2-209 (Smith-Hurd Supp. 1992); N.Y. CIV. PRAC. L. & R. 302(a) (McKinney 1990).

115. *See* NEELY, *supra* note 112, at 68.

116. One judge has provided a colorful illustration of the problem: Imagine a suit between an in-state plaintiff injured in a mysterious auto accident and a foreign tire manufacturer whose tires may have caused the accident. The jurors' decisions in such cases can invariably be reduced to a single proposition; *viz.*, whether or not to make a wealth transfer from an out-of-state defendant to an in-state plaintiff. Under such circumstances, the jurors' loyalties will naturally incline to the plaintiff. *Id.* at 10-11.

117. The pressure to find for in-state plaintiffs has essentially two sources. First, in nearly half of the states, judges are elected, and are therefore accountable to the state's citizenry. *Id.* at 62. In these states, it surely cannot escape judges' notice that, as one commentator has put it, "the in-state local plaintiff, his witnesses, and his friends, can all vote for the judge, while the out-of-state defendant can't even be relied upon to send a campaign contribution." *Id.* Additionally, judges are human beings, with all the frailties and weaknesses that accompany membership in the race. *See id.* at 11. In the context of our earlier example, one appellate judge stated this point with inimitable clarity:

If I say to myself "the hell with those Frenchmen at Michelin!" and give some injured West Virginian a few hundred thousand dollars, it doesn't shatter the foundations of West Virginia's commercial world. Since I'm paid to choose between deciding for Michelin and sleeping well, I choose sleeping well. Why hurt my friends when there's no percentage in it?

Id. at 7.

is, on the whole, generous to plaintiffs can result in the imposition of substantial costs on out-of-state interests.¹¹⁸ Under these circumstances, as one commentator has noted, "the logic of collective action implies that no one state or group of states will undertake to act responsibly to curtail off-line wealth redistribution, given irresponsibility on the part of neighboring states."¹¹⁹

4. *Labor Law*

The argument is often encountered that the field of labor law fits the paradigm of the prisoner's dilemma, and that federal intervention is required in order to prevent a competitive race to the bottom.¹²⁰ Indeed, forceful presentation of the argument before the Supreme Court assisted in the passage of national labor legislation during the New Deal.¹²¹ This argument, however, rests in most cases on the fallacy that states are incapable of enacting redistributive legislation to offset the undesired consequences of allegedly beneficial allocational legislation.

One of the earliest cases¹²² in which the prisoner's dilemma model was raised was *A.L.A. Schechter Poultry Corp. v. United States*.¹²³ The case involved provisions of the National Industrial Recovery Act which authorized the President to approve of "codes of fair competition" developed by various industry boards. Pursuant to those provisions, the President approved a code governing the marketing of live poultry in New York City. The code established, inter alia, a minimum wage and a maximum work week.

118. The conclusions in the text must be qualified. To the extent that the tort judgments are imposed upon national actors who are capable of price discrimination based on geographic factors, those actors are in a position to force the state to internalize the costs of the system, by charging more for the goods or services sold within the offending jurisdiction. This ability, however, is limited by the lack of control which manufacturers exercise over their products after sale, as well as by laws prohibiting price discrimination. This same consideration applies to cases wherein the nominal defendant is a local resident but where the real defendant is a national insurance carrier. To the extent that the insurance carrier is able to adjust its rates to account for local variations in tort law, the costs will be sent back into the offending state. See *id.* at 70 (noting that medical malpractice insurance premiums vary among regions).

119. *Id.* at 4.

120. See, e.g., RIKER, *supra* note 11, at 146; Robert L. Stern, *That Commerce Which Concerns More States Than One*, 47 HARV. L. REV. 1335 (1934).

121. *United States v. Darby*, 312 U.S. 100 (1941).

122. The argument was first raised in *Hammer v. Dagenhart*, 247 U.S. 251 (1918) (The Child Labor Case), but, owing to the existence of an interesting wrinkle in that case, discussion of it will be postponed. See *infra* text accompanying notes 130-33.

123. 295 U.S. 495 (1935) (The Sick Chicken Case).

The Court described the government's prisoner's dilemma argument:

The Government also makes the point that efforts to enact state legislation establishing high labor standards have been impeded by the belief that unless similar action is taken generally, commerce will be diverted from the States adopting such standards, and that this fear of diversion has led to demands for federal legislation on the subject of wages and hours. The apparent implication is that the federal authority under the commerce clause should be deemed to extend to the establishment of rules to govern wages and hours in intrastate trade and industry generally throughout the country, thus overriding the authority of the States to deal with domestic problems arising from labor conditions in their internal commerce.¹²⁴

The Court rejected the argument. The same argument was, however, made again in *Carter v. Carter Coal Co.*¹²⁵ and finally accepted by the Court in *United States v. Darby*.¹²⁶

The same issue has recently surfaced in the European Community. As barriers to the free flow of capital across national lines are removed, members of the community who have developed high labor standards, such as France and Germany, have voiced concerns that they will be forced to sacrifice those standards in order to prevent the relocation of industry to countries with lower labor standards, such as Spain and Portugal.¹²⁷

The argument in support of federal intervention is easily refuted. Labor legislation typically has both allocational and redistributive effects, although sometimes the allocational effects are so slight and so contrary to the apparent designs of the legislator that they are easily ignored. A minimum wage law, for example, effects wealth

124. *Schechter*, 295 U.S. at 549.

125. 298 U.S. 238, 246 (1936) (oral argument of Mr. Wood) (noting that opposing counsel had made the same "timeworn and threadbare argument" that was rejected in *Schechter*).

126. 312 U.S. 100, 122 (1941) (upholding the Fair Labor Standards Act of 1938, ch. 675, 52 Stat. 1040 (codified as amended at 29 U.S.C. §§ 201-219 (1988))), so as to enable the government to prevent "the spread of substandard labor conditions through the use of the facilities of interstate commerce for competition").

127. William Drozdiak & Marc Fisher, *Europeans Agree on Unity Pacts Stalemate Avoided By Granting Britain Key Concessions*, WASH. POST, December 11, 1991, at A1; see also Stith, *supra* note 104; DENNIS SWANN, COMPETITION AND INDUSTRIAL POLICY IN THE EUROPEAN COMMUNITY (1983); Jorn Pipkorn, *Comparative Labor Law in the Harmonization of Social Standards in the European Community*, 2 COMP. LAB. L. 260 (1977). The issue came to a head at a meeting of E.C. leaders in December 1991, when Great Britain refused to cooperate with the other eleven members of the community. Drozdiak & Fisher, *supra*, at A1. Prime Minister John Major stated flatly that he would not adopt proposals that would increase labor costs, throw thousands out of work, and lead to irksome bureaucratic regulation that would stifle enterprise. *Welcome to Mr. Major's Wonderful Bargain Basement*, INDEPENDENT, December 15, 1991, at 24. His refusal was due in part to a desire not to undo the efforts of the Thatcher administration to dismantle similar systems. Drozdiak & Fisher, *supra*, at A1. One E.C. official responded by prophesying that Britain "would become the Hong Kong of the community." *Id.*

transfers from consumers and shareholders (depending on the elasticities in the industry) to workers, from some workers to other workers, and from regulated industries to unregulated industries, particularly those manufacturing equipment that can be used to replace the workers in the regulated industries. In the end, it is difficult to tell what the supposedly desirable allocational effects of such legislation are.¹²⁸

In any event, let us suppose, charitably, that such legislation is desired for its allocational effects, and not as an ill-conceived attempt to redistribute from industry to workers. In such a case, the redistributive effects of the statute are nothing but undesirable side effects. The remedy in such a case is not federal intervention, but rather enactment of an offsetting redistributive statute designed to put the costs of the statute on the part of society thereby benefitted. For example, a state desiring a minimum wage law could grant tax credits to employers calculated to neutralize the effects of the law. Such a plan could be financed out of, say, higher sales taxes, thereby putting the cost of the legislation on consumers generally, who presumably are the ones benefitted by the allocational effects of the legislation.

If the statute is truly desired for its efficient allocational effects, then an offsetting redistributive statute is all that is necessary to enable it to achieve its end. If the redistributive statute does not suffice, it is because the costs of the statute outweigh its benefits. In such a case, competition between states will convince the state of the folly of its chosen path. Federal intervention in such cases does nothing but perpetuate inefficient regulatory techniques.¹²⁹

An interesting wrinkle to the issue was raised in *Hammer v. Dagenhart*.¹³⁰ The case involved the constitutionality of a federal law¹³¹ which prohibited the shipment in interstate commerce of

128. One argument is that it is desirable to have fewer workers working for higher wages, the assumption apparently being that the workers rendered jobless by the legislation will be the spouses of the workers who retain their jobs.

129. And yet that is precisely what much federal legislation accomplishes. Richard Epstein put the point succinctly when he wrote that "[t]he ability to conceive of competitive injury as a justification for the exercise of federal power lies at the root of all the modern commerce clause decisions." Epstein, *supra* note 3, at 1453-54.

130. 247 U.S. 251 (1918), *overruled by* United States v. Darby, 312 U.S. 100 (1941).

131. Act of September 1, 1916, ch. 432, 39 Stat. 675.

products manufactured using child labor. The Solicitor General, arguing in support of the act, relied almost exclusively on the prisoner's dilemma model.¹³²

The legislation of the States on the subject was not uniform, and many States were without the provisions which came to be regarded as the standard necessary for the public protection The State authorizing the use of such labor in products shipped into other States was thought unfairly to discriminate against the citizens of the latter Thus, if one State desired to limit the employment of children, it was met with the objection that its manufacturers could not compete with manufacturers of a neighboring State which imposed no such limitation. The shipment of goods in interstate commerce by the latter, therefore, operates to deter the former from enacting laws it would otherwise enact for the protection of its own children.¹³³

This argument, dismissed above in the context of legislation seeking to protect the interests of adults, is not so easily rejected in the context of child labor laws. In this context, the allocational effects of the legislation are somewhat more obvious. A state statute prohibiting child labor could be premised on the assumption that children's time is better spent in school or at home than in a factory, and that legislation forbidding child labor would maximize society's wealth.

The redistributive effects of such a statute are complex. Such a statute would effect wealth transfers from consumers and shareholders (depending on the elasticities in the industry) and from couples with children to adult workers without children and to industries manufacturing equipment that can be used to replace children. Of all of these, the obviously undesirable one is the one coming from shareholders, for that is what would drive industry away.

The solution proposed in the context of other allocational legislation with undesirable redistributive effects was the compensation of the injured parties out of the gains accruing to the benefitted parties. This solution does not apply to child labor legislation, however, because the benefits are not due to appear until the current children grow up to be more educated and therefore more productive adults. Because there is no guarantee that those children, once grown, will remain in the state, such child-labor statutes appear to generate significant positive externalities.¹³⁴ Accordingly, the states appear to be

132. See *Hammer*, 247 U.S. at 254-58.

133. *Id.* at 254.

134. This is consistent with the suggestion of many economists that the provision of education generates significant positive externalities, and that federal control over public education would therefore be beneficial. See, e.g., BURTON A. WEISBROD, *EXTERNAL BENEFITS OF PUBLIC EDUCATION* (1974); GARY S. BECKER, *HUMAN CAPITAL* (2d ed. 1975); OATES, *supra* note 5, at 46. It must be conceded that the efficiency gains flowing from internalization of costs due to nationalization of educational programs might well be outweighed by losses due to diseconomies of scale. At least one commentator has noted this, and has suggested that the proper allocation of responsibilities is that which currently exists: local control over education supported by federal subsidies. See MICHAEL CONANT, *THE CONSTITUTION AND THE ECONOMY: OBJECTIVE THEORY AND*

in a true prisoner's dilemma, and federal intervention is justified.

5. *Environmental Law*

It is often suggested that attempts to enact desirable environmental legislation place the states in a race to the bottom. To the extent that these arguments are premised upon state attempts to regulate environmental effects that occur outside the state, the prisoner's dilemma accurately describes the situation. But where the costs and benefits of a proposed environmental policy are borne entirely within the state, the race to the bottom hypothesis is unsupportable.

Perhaps the leading proponent of the race to the bottom hypothesis in environmental law is Richard Stewart. Professor Stewart writes:

Given the mobility of industry and commerce, any individual state or community may rationally decline unilaterally to adopt high environmental standards that entail substantial costs for industry and obstacles to economic development for fear that the resulting environmental gains will be more than offset by movement of capital to other areas with lower standards. If each locality reasons in the same way, all will adopt lower standards than they would prefer if there were some binding mechanism that enabled them simultaneously to enact higher standards, thus eliminating the threatened loss of industry or development.¹³⁵

The "binding mechanism," of course, is provided by federal intervention.

This same argument was made by the Supreme Court in upholding, in *Hodel v. Virginia Surface Mining & Reclamation Association*,¹³⁶ the Surface Mining Control and Reclamation Act of 1977.¹³⁷ The Court relied on the congressional finding, set forth in the act, that nationwide "surface mining and reclamation standards are essential in order to insure that competition in interstate commerce among sellers of coal produced in different States will not be used to undermine the ability of the several States to improve and maintain adequate standards on coal mining operations within their borders."¹³⁸ The Court then cited *Darby*¹³⁹ in support of the proposition

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135. Richard B. Stewart, *Pyramids of Sacrifice? Problems of Federalism in Mandating State Implementation of National Environmental Policy*, 86 YALE L.J. 1196, 1212 (1977) (footnote omitted).

136. 452 U.S. 264 (1981).

137. Pub. L. No. 95-87, 91 Stat. 447 (codified as amended at 30 U.S.C. §§ 1201-1328 (1988)).

138. *Hodel*, 452 U.S. at 281-82 (quoting 30 U.S.C. § 1201(g)).

139. *United States v. Darby*, 312 U.S. 100 (1941).

that "[t]he prevention of this sort of destructive interstate competition is a traditional role for congressional action under the Commerce Clause."¹⁴⁰

Professor Stewart's statement of the argument contains its own refutation. Assuming that the environmental effects sought to be regulated are contained entirely within the state, then if "the resulting environmental gains will be more than offset by movement of capital," the regulation is inefficient. If the citizens of a state are not willing to pay the price for cleaner living conditions, their judgment should presumably be respected.¹⁴¹

In fairness to Professor Stewart, let us assume that the proposed environmental legislation is Kaldor-Hicks efficient but not Pareto efficient. It has, in other words, both salutary allocational effects and undesirable redistributive effects. It results in a cleaner environment for which the residents of the state are willing to pay, but it imposes the costs on industry, which presumably does not care about the environment.

Once again, the solution to the problem is not federal intervention but remedial redistributive legislation. The state should be able to enact legislation transferring the costs of the measures required by the statute from industry to those who are benefitted by the statute, presumably all residents of the state. A tax credit could be given to affected industries, and the revenues recouped by heavier taxes on the benefitted group. In fact, the required remedial legislation would not need to redistribute *all* of the costs associated with the environmental legislation, because some of those costs will be recovered by industry in the form of lower wage rates.¹⁴²

140. *Hodel*, 452 U.S. at 282.

141. See Richard O. Zerbe, *Optimal Environmental Jurisdictions*, 4 *ECOLOGY L.Q.* 193, 202-03 (1974) (suggesting that allowing states to select their own levels of environmental protection will maximize each state's welfare).

142. I myself work in the Bay area, where my wages are lower relative to local living expenses than in almost any large city in America. I am willing to make this sacrifice, however, so that I may enjoy life in beautiful northern California, the retention of much of the value of which is attributable to California's stringent environmental codes.

In fairness to Professor Stewart, he anticipated and addressed this response by stating that, "[I]n actual practice, this compensating adjustment will not occur because labor and capital are imperfectly mobile, governmental and union policies may inhibit wage rate adjustments, and individuals may be ignorant of some of the benefits of environmental quality, such as lessened health risks." Stewart, *supra* note 135, at 1212 n.66.

Of these three retorts, only the second has any bite whatsoever, and I am dubious about even that. It is difficult to see how the first argument affects the analysis, since we are assuming that the state's residents voted for the measure and that industry would be able to recoup its costs. Mobility plays no role except to strengthen the case for decentralization by enabling like-minded individuals to move to the state. Similarly, more direct remedies for voter or consumer ignorance can be conceived than federal intervention, such as more effective lobbying on the part of advocates of the proposed legislation or educational efforts on the part of the state.

The remedial legislation may even be customized to place the costs of the statute on those who truly desire the change. For instance, the advocates of environmental legislation might occupy a specific demographic or socioeconomic class. Wealthy residents of the state might be willing to pay more for a clean environment than those with less disposable income.¹⁴³ An offsetting redistributive statute could easily remedy the situation by placing the costs and burdens on the same group. Instead of using a general increase in the level of taxes, the state could simply raise the tax rate in the highest tax bracket or enact a luxury tax.

To the extent that state environmental legislation is sought to regulate effects that take place entirely within the state, then, federal intervention is unnecessary.¹⁴⁴ Many pollutants, however, cross state lines.¹⁴⁵ With respect to these pollutants, the states are in a prisoner's dilemma, and federal legislation is appropriate.

Suppose, for example, that a state is considering enactment of a statute that would severely curtail airborne particulate emissions. Suppose further that the majority of the smoke-emitting facilities that would be affected by the statute are located such that the bulk of the smoke from the factories spends very little time in the state before drifting eastward over neighboring states. In such a case, the state will have no incentive to enact air quality legislation, because the greater part of the resulting benefits will be enjoyed by the residents of the neighboring state.¹⁴⁶

143. See William J. Baumol, *Environmental Protection and Income Distribution*, in REDISTRIBUTION THROUGH PUBLIC CHOICE 93 (Harold M. Hochman & George E. Peterson eds., 1974); Wallace E. Oates & Robert M. Schwab, *Economic Competition Among Jurisdictions: Efficiency Enhancing or Distortion Inducing?*, 35 J. PUB. ECON. 333, 345 (1988).

144. For a good example of federal officiousness gone awry, consider the Safe Drinking Water Act, 42 U.S.C. §§ 300f to 300j-26(1988). As its name implies, the Act regulates the operation of public water systems, a state function that is almost by definition local in nature. See David H. Getches, *Groundwater Quality Protection: Setting a National Goal for State and Federal Programs*, 65 CHI-KENT L. REV. 387, 387 (1989) (observing that "the resource to be protected is essentially local").

145. See *supra* notes 66-67 (discussing *Missouri v. Illinois*, 200 U.S. 496 (1906), which concerned raw sewage flowing down the Mississippi, and *Georgia v. Tennessee Copper Co.*, 206 U.S. 230 (1907), which involved sulphur dioxide wafting over the border).

146. A related example sometimes encountered in the literature involves a state that is home to a great environmental treasure that is enjoyed by tourists. See, e.g., Zerbe, *supra* note 141, at 205; Richard Stewart, *The Development of Administrative and Quasi-Constitutional Law in the Judicial Review of Environmental Decisionmaking: Lessons from the Clean Air Act*, 62 IOWA L. REV. 713, 747 (1977). To the extent that the state is unable to charge user fees for the enjoyment of such an asset, the benefits of protection of the asset through environmental regulation will accrue to non-residents.

This situation, which presents a fair depiction of certain types of environmental pollutants in the United States,¹⁴⁷ is the paradigmatic prisoner's dilemma. Because most, although far from all, states are both generators and receivers of pollution from other states, all states could be made better off by the adoption of federal environmental legislation.¹⁴⁸ To the extent that some states are net exporters of pollution, regulation is at least Kaldor-Hicks efficient. In either case, one of the prisoner's dilemma models applies, and the states as a group could benefit from forced internalization of the costs.

IV. THE ORIGINAL UNDERSTANDING OF THE COMMERCE CLAUSE

The conception of federal commerce power advocated herein is consistent not only with insights gleaned from modern economic analysis but also with the original understanding of the framers. This is not to suggest that the framers engaged in their debates armed with all of the conceptual ammunition with which the modern social sciences provide us. Such a suggestion would be both preposterous and unnecessary. It is sufficient, I think, to demonstrate that the framers were intuitively aware of some of the more basic economic truths of their day, and that they intended to incorporate that understanding into the document they created.

The framers designated a class of state actions that they deemed injurious to the wealth and prosperity of the new nation, and it was their intention to prohibit regulatory activity that fell within that class. The class of regulation that the framers intended to prohibit is susceptible of precise definition. It includes all those activities where state regulation would be inefficient due to the presence of externalities.

The framers were aware of the existence of both positive and negative externalities, and they understood the prisoner's dilemma associated with certain types of legislation. They accordingly intended to deny the states the ability to regulate in these areas. As they did not desire to create a void wherein neither the states nor the federal government would have regulatory authority, they empowered the federal government to regulate where they had prohibited the states from doing so. The result was a grant of power to Congress that was

147. See, e.g., STEWART & KRIER, *supra* note 50, at 1215 (noting that "a significant percentage of sulfate pollution in the eastern states is attributable to emissions originating hundreds of miles westward").

148. Note that to the extent that some states are net generators of pollution, they might be made worse off by the adoption of such standards. The situation could not then be described as a true prisoner's dilemma, since at least one out of fifty prisoners might be made worse off. See *supra* text accompanying note 85. Even in such a situation, however, the correction of externalities is nonetheless desirable, as the resulting situation is at least Kaldor-Hicks superior to the status quo.

coextensive with the area denied to the states.¹⁴⁹

This Part will begin by setting forth the problems under the Articles of Confederation. It will then examine the remedies which the framers proposed, concentrating on the one ultimately adopted. It will be demonstrated that both the problems which prompted the Constitutional Convention and the solution devised therein can be described in terms of externalities.

A. Problems Under the Articles of Confederation

The difficulties which the states experienced under the Articles of Confederation can be classified into two categories: the inability of the states to raise revenue and interstate exploitation. Which of these problems was present in any given instance depended upon the extent to which a state was successful in raising revenue. While the inability of some states to raise revenue was often cause for complaint, the success of others was often so great as to generate complaints of exploitation.

Both of these problems can be understood in terms of externalities. The failure of some states to raise revenue, and the related inability of the federal government to raise funds, can be seen as involving positive externalities flowing from revenue-raising activities and from the activities that were to be funded by the revenues. State complaints of exploitation, on the other hand, obviously indicate the existence of negative externalities. Each of these problems will be discussed in turn.

149. It may be argued that it is not proper to extrapolate from the framers' intentions that are known to us, or to attempt to construct the framers' attitudes toward some other subjects simply because those subjects fall into a larger category of subjects of which the framers' intentions are known to us.

The answer to this criticism is, of course, that scholars are constantly engaged in just such an analysis. Reconstructive theories of the common law, for example, are myriad, and this is particularly true of theories that utilize an economic approach. *See, e.g.*, POSNER, *supra* note 72; GUIDO CALABRESI, *THE COSTS OF ACCIDENTS* (1970); WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF TORT LAW* (1987); Thomas W. Merrill, *Trespass, Nuisance, and the Costs of Determining Property Rights*, 14 J. LEGAL STUD. 13 (1985); STEVEN SHAVELL, *ECONOMIC ANALYSIS OF ACCIDENT LAW* (1987). Moreover, the realm of constitutional jurisprudence has not escaped the notice of law and economics scholars intent on applying their reconstructive theories to increasingly challenging fields. *See, e.g.*, Posner, *supra* note 48; Collins, *supra* note 11; CHARLES A. BEARD, *AN ECONOMIC INTERPRETATION OF THE CONSTITUTION OF THE UNITED STATES* (1913); JAMES M. BUCHANAN, *EXPLORATIONS INTO CONSTITUTIONAL ECONOMICS* (1989).

1. Inability to Raise Revenue

Imposts and other duties constituted the primary source of revenues under the Articles of Confederation. As states attempted to raise revenues through these means, however, they encountered stiff competition from other ports on the eastern seaboard. Any state attempting to raise revenue through tariffs ran the risk of losing shipping to other states with lower duties.¹⁵⁰ As a result, some states, particularly those that lacked convenient natural harbors, found it virtually impossible to raise any revenue at all.¹⁵¹

The difficulties that states encountered in attempting to raise revenue were further complicated by their responsibility to support the federal government. Under the Articles, the Continental Congress had no ability to raise funds independent of the states. The Articles authorized Congress to requisition the states for money, but they provided no enforcement mechanism.¹⁵²

The federal government's dependence on the states for revenue presented the problem of collective action in its most pristine form. For just as no state acting alone had an incentive to provide the pure public goods for which the federal government was responsible,¹⁵³ so too did the states lack any incentive to remit to the federal government the funds necessary to enable it to engage in such projects. While each state had an interest in obtaining the public goods that the federal government would provide, it was in the interest of no

150. Madison, addressing the Convention, referred to the states' "vain attempts to supply their respective treasuries by imposts, which turned their commerce into the neighbouring ports" James Madison, *Preface to the Debates in the Convention of 1787*, in 3 THE RECORDS, *supra* note 9, at 547.

151. Many modern economists argue that the states are today in a similar situation, in which the ability of citizens to migrate among states prevents most states from raising revenue sufficient to provide the optimal level of public goods and services. See, e.g., John H. Beck, *Tax Competition, Uniform Assessment, and the Benefit Principle*, 13 J. URB. ECON. 127 (1983); John D. Wilson, *Optimal Property Taxation in the Presence of Interregional Capital Mobility*, 17 J. URB. ECON. 73 (1985). Other economists have argued that this tax competition is generally salutary, and that, in the absence of interjurisdictional spillovers, any ill effects of the competition can be minimized by levying benefit taxes, taxes designed to shift the cost of any governmental activity onto the group benefitted. See, e.g., McLure, *supra* note 93. This is essentially a restatement of the argument set forth above in Part III.B, that the undesirable redistributive effects of efficient allocational regulation can be counteracted with offsetting redistributive legislation so as to prevent flight from the jurisdiction. See *supra* text accompanying notes 88-89.

152. ALFRED H. KELLY ET AL., *THE AMERICAN CONSTITUTION: ITS ORIGINS AND DEVELOPMENT* 82 (1991).

153. That the framers understood that one of the primary functions of the federal government was to provide public goods is beyond question. For example, Hamilton, speaking during the ratification debates, noted that one of the great objects of national government was to "provide for the common defence." 2 DEBATES, *supra* note 8, at 350. Similarly, Randolph observed that one of the aims of a federal government was "the establishment of great national works — the improvement of inland navigation." 1 THE RECORDS, *supra* note 9, at 25-26 (notes of James McHenry).

state to contribute to the federal coffers.

The problem of collective action did not escape the notice of the framers. For instance, Madison wrote that one of the principal vices of the Confederation was "want of concert in matters where common interest requires it."¹⁵⁴ Perhaps George Washington best captured the essence of the prisoner's dilemma when he wrote to John Jay that "men will not adopt and carry into execution measures the best calculated for their own good, without the intervention of a coercive power."¹⁵⁵

Related to the state's inability to levy tariffs so as to raise a revenue was their inability to use tariffs to discriminate against British shipping. By the end of the Revolution, Great Britain had passed numerous navigation acts regulating trade with the colonies. These acts were designed so as to enable British merchants to extract the entire gains from trade with the colonies. Some acts forbade the colonies from trading with any countries except Great Britain, thus placing the colonies at the mercy of a dual monopolist/monopsonist. Others required all shipping between Great Britain and the colonies to be carried out in British bottoms. Since, at the time, a large portion of the gains from trade were absorbed by shipping fees, these acts enabled Great Britain to extract even more money from the colonists.

The navigation acts were a source of constant annoyance to the Americans. It was clear that America needed to enter into a trade agreement with Great Britain. The Americans, however, had no bargaining power. Since Great Britain was extracting the maximum amount of profits from the colonies, it had no incentive to enter into any sort of negotiations.¹⁵⁶ The Americans, in order to force concessions from the British, needed leverage.

Such leverage could take only one form. The states needed to enact legislation prohibiting British ships from entering American harbors, just as the British legislation prohibited American vessels

154. 9 THE PAPERS OF JAMES MADISON 350 (William T. Hutchinson ed., 1977); see also 1 THE FOUNDERS' CONSTITUTION 167 (Philip B. Kurland & Ralph Lerner eds., 1987).

155. 28 THE WRITINGS OF GEORGE WASHINGTON FROM THE ORIGINAL MANUSCRIPT SOURCES, 1745-1799 at 502 (John C. Fitzpatrick ed., 1944); see also 1 THE FOUNDERS' CONSTITUTION, *supra* note 154, at 162.

156. In the language of Roger Fisher and William Ury, Great Britain's BATNA—its best alternative to a negotiated agreement—was superior to any possible negotiated result. See ROGER FISHER & WILLIAM URY, GETTING TO YES: NEGOTIATING AGREEMENT WITHOUT GIVING IN 104 (1981). In order to reach an agreement, then, the Americans needed to reduce Britain's BATNA. See *id.* at 110.

from entering British ports.¹⁵⁷ Passage of such legislation by the states would provide the necessary leverage in negotiations with the British. Adoption of such regulations, however, invariably ran into one insuperable obstruction: the prisoner's dilemma. Although it was in the collective interest of the states to temporarily prohibit British shipping, it was not in the interest of any individual state to do so.

Various states attempted courageously to lead the battle. In 1785, for example, Massachusetts enacted a law prohibiting the exportation of American goods in British vessels, subjecting goods imported in vessels flying under foreign flags to twice the import duties levied on goods imported in American vessels, and imposing a tonnage duty on all foreign vessels.¹⁵⁸

After enactment of the law, Governor Bowdoin sent a circular letter to the governors of the other states urging them to adopt similar regulations.¹⁵⁹ Predictably, the response was less than overwhelming. Although some states reacted enthusiastically,¹⁶⁰ and some even accepted Governor Bowdoin's invitation to enact similar legislation,¹⁶¹ most states did nothing. As a result, Massachusetts began to lose a significant amount of trade to the other states.¹⁶² A little over a year after its passage, Massachusetts repealed its navigation act.¹⁶³ A frustrated Governor Bowdoin used the occasion to send yet another letter to his counterparts, reprimanding them for attempting to gain at the expense of a state trying to do its duty in the commercial war against the British.¹⁶⁴

157. See, e.g., 1 BLACKSTONE'S COMMENTARIES APP. 248 (George Tucker ed., 1803) ("The conduct of Great Britain in declining any commercial treaty with America, at that time, was unquestionably dictated at first by a knowledge of the inability of congress to extort terms of reciprocity from her."); see also 1 THE FOUNDERS' CONSTITUTION, *supra* note 154, at 488. John Adams stated flatly that "[t]he commerce of America will have no relief at present, nor, in my opinion, ever, until the United States shall have generally passed navigation acts. If this measure is not adopted, we shall be derided; and the more we suffer, the more will our calamities be laughed at." Letter to John Jay, *quoted in* Kitch, *supra* note 76, at 16-17.

158. Act of June 23, 1785, 1785 MASS. ACTS 439-43; see also MERRILL JENSEN, THE NEW NATION: A HISTORY OF THE UNITED STATES DURING THE CONFEDERATION, 1781-1789 at 292-93 (1950).

159. Letter from James Bowdoin to Gov. Nicholas Van Dyke (July 28, 1785), in NICHOLAS VAN DYKE PAPERS, LC; see also JENSEN, *supra* note 158, at 293 (suggesting that several other states had anticipated Massachusetts's move and had enacted similar legislation).

160. See, e.g., Letter from Governor Moultrie (South Carolina) to Governor James Bowdoin (September 20, 1785), PENN. GAZETTE, February 22, 1786; see also JENSEN, *supra* note 158, at 293-94.

161. See, e.g., Act of March 4, 1786, 5 LAWS OF NEW HAMPSHIRE 146-48; see also JENSEN, *supra* note 158, at 294.

162. See JENSEN, *supra* note 158, at 297.

163. Act of July 8, 1786, 1786 MASS. ACTS 67-68; see also JENSEN, *supra* note 158, at 297.

164. Letter to Governor Van Dyke, July 10, 1786, NICHOLAS VAN DYKE PAPERS, LC; see also JENSEN, *supra* note 158, at 298.

Animosities also existed between New York and New Jersey on account of the latter's failure to discriminate against British shipping.¹⁶⁵ New Jersey, long angered by being made to pay duties on foreign goods imported through New York,¹⁶⁶ in 1783 declared its ports free and open.¹⁶⁷ New York responded by levying a tax on the few foreign goods imported through Connecticut and New Jersey.¹⁶⁸ New Jersey then retorted by imposing a tax on New York's Sandy Hook lighthouse.¹⁶⁹

The framers understood the dynamics of the situation, and realized the role that the federal government would play in coercing cooperation among the states. Randolph, in presenting his plan to the Convention,¹⁷⁰ observed the need for "counteraction of the commercial regulations of other nations."¹⁷¹ Later, in a letter to the Virginia ratification convention, he set forth the sorry state of affairs:

No sooner is the merchant prepared for foreign ports, with the treasures which this new world kindly offers to his acceptance, than it is announced to him that they are shut against American shipping, or opened under oppressive regulations. He urges Congress to a counter-policy, and is answered only by a condolence on the general misfortune. He is immediately struck with the conviction that, until exclusion shall be opposed to exclusion, and restriction to restriction, the American flag will be disgraced; for who can conceive that thirteen legislatures, viewing commerce under different points of view, and fancying themselves discharged from every obligation to concede the smallest of their commercial advantages for the benefit of the whole, will be wrought into a concert of action, and defiance of every prejudice?¹⁷²

Other references to the prisoner's dilemma abound.¹⁷³ Contemporary commentary is replete with observations that indicate not only

165. See JENSEN, *supra* note 158, at 338.

166. See *infra* text accompanying notes 175-80.

167. JENSEN, *supra* note 158, at 338.

168. *Id.* at 339.

169. *Id.*

170. See *infra* text accompanying notes 190-93.

171. 1 THE RECORDS, *supra* note 9, at 19 (notes of James Madison).

172. 1 DEBATES, *supra* note 8, at 479.

173. Alexander Hamilton wrote that "many cases may occur in which it would be beneficial to all the states to encourage, or suppress a particular branch of trade, while it would be detrimental to either to attempt it without the concurrence of the rest, and where the experiment would probably be left untried for fear of a want of that concurrence." 3 THE PAPERS OF ALEXANDER HAMILTON 378 (Harold C. Syrett ed., 1979); see also 2 THE FOUNDERS' CONSTITUTION, *supra* note 154, at 478. Charles Pinckney observed to the South Carolina legislature that the greatest inconvenience of the Confederation was "the destruction of our commerce occasioned by the restrictions of other nations, whose policy it was not in the power of the general government to counteract." 4 DEBATES, *supra* note 8, at 253. George Clymer spoke in Pennsylvania of the need of the states "to defend themselves against foreign regulation." 2 THE RECORDS, *supra* note 9,

the framers' understanding of the problem, but also their intention that the federal government provide the coercive power necessary to compel the states to act in their collective best interest.

2. *Interstate Exploitation*

The preceding section described the problems that stemmed from the states' unsuccessful attempts to raise revenue through tariffs. To the extent that some states were successful in such attempts, another problem arose, and that was the problem of tax exportation. To a great extent, revenues raised through duties were paid in the end by citizens of states other than the one imposing the tax.¹⁷⁴

As noted above,¹⁷⁵ a state's ability to export taxes depends upon the extent to which the state possesses a geographical monopoly. Such monopolies were quite common in colonial times. Several eastern states, such as New York and South Carolina, found themselves the fortunate overseers of the only convenient natural harbors on long stretches of coastline.¹⁷⁶ States in such positions exercised considerable market power and could impose high levels of taxes, secure in the knowledge that the bulk of them would be paid by out-of-staters.

This exploitation was a source of constant annoyance for states that lacked natural harbors,¹⁷⁷ and played a large role in prompting

at 450. And Davie, addressing the North Carolina ratification convention, stated that "[t]he United States should be empowered to compel foreign nations into commercial regulations." 4 DEBATES, *supra* note 8, at 18. Dawes, speaking in the Massachusetts convention, observed that the difficulty that the states were having in raising a revenue was due to a similar prisoner's dilemma. Even states that desired to fulfill their share of the federal quotas, he reasoned, could not do so, because the only means of raising money at their disposal was imposition of new duties. The problem was that "[t]his would drive the trade to such neighbouring states as made no such new impositions; thus the revenue would be lost with the trade." 2 *id.* at 57. Similarly, one pamphleteer wrote, "[d]oes one of the states attempt to raise a little money by imposts or other commercial regulations? A neighboring state immediately alters her laws, and defeats the revenue by throwing the trade into a different channel. Instead of supporting or assisting, we are uniformly taking the advantage of one another." ESSAYS ON THE CONSTITUTION OF THE UNITED STATES 403 (Paul L. Ford ed., 1892) [hereinafter ESSAYS].

174. See PAMPHLETS, *supra* note 6, at 62 (Noah Webster) (observing that "[t]hose states which have no advantages, made equal exertions for independence, loaded themselves with immense debts, and now are utterly unable to discharge them; while their richer neighbors are taxing them for their own benefit, merely because they *can*").

175. See *supra* text following note 67.

176. See, e.g., THE FEDERALIST NO. 7, at 38 (Alexander Hamilton) (Carl Van Doren ed., 1945) ("New York . . . must lay duties on her importations. A great part of these duties must be paid by the inhabitants of the other two States [New Jersey and Connecticut] in the capacity of consumers of what we import.").

177. *Id.* (noting that "[t]he opportunities which some States would have of rendering others tributary to them by commercial regulations would be impatiently submitted to by the tributary States."); THE FEDERALIST NO. 35, at 217 (Alexander Hamilton) (Carl Van Doren ed., 1945) (noting that "[t]he maxim that the consumer is the payer, is so much oftener true than the reverse of the proposition, that it is far more equitable that

the framers to grant the power over commerce to the federal government rather than to the states.¹⁷⁸ One contemporary commentator, for example, observed that two thirds of the foreign goods imported into North Carolina came by land from Virginia and South Carolina, both of which imposed duties. As a result, his state was like "a patient bleeding at both arms."¹⁷⁹ New Jersey, similarly situated between New York and Pennsylvania, was referred to as a "Cask tapped at both ends."¹⁸⁰

The framers realized that the states possessing such natural monopolies would devise their tax systems so that the taxes fell to the greatest extent possible on foreign citizens. James Madison wrote:

[I]t must be foreseen that ways would be found out to load the articles of import and export, during the passage through their jurisdiction, with duties which would fall on the makers of the latter and the consumers of the former. We may be assured by past experience, that such a practice would be introduced by future contrivances.¹⁸¹

the duties on imports should go into a common stock, than that they should redound to the exclusive benefit of the importing States."); Other framers also noted the existence of interstate exploitation. Wilson, in the convention, "dwelt on the injustice and impolicy of leaving N. Jersey, Connecticut &c any longer subject to the exactions of their commercial neighbors." 2 *THE RECORDS*, *supra* note 9, at 307; *see also* 3 *id.* at 548 (noting that some states taxed imports from other states higher than those from Great Britain). Madison was later to write in a letter to Professor Davis that "New York, Pennsylvania, Rhode Island, and Virginia, previous to the establishment of the present Constitution, had opportunities of taxing the consumption of their neighbors." 4 *LETTERS AND OTHER WRITINGS OF JAMES MADISON* 251 (1865); *see also* 3 *THE RECORDS*, *supra* note 9, at 519.

178. *See, e.g.*, *THE FEDERALIST* No. 42, at 282 (James Madison) (Carl Van Doren ed., 1945) ("A very material object of [the commerce] power was the relief of States which import and export through other States, from the improper contributions levied on them by the latter."); *see also* 2 *THE RECORDS*, *supra* note 9, at 306. In light of all of this evidence, Justice Day undoubtedly painted with too broad a stroke when he wrote in *Hammer v. Dagenhart*, 247 U.S. 251 (1918), that "[m]any causes may cooperate to give one State, by reason of local laws or conditions, an economic advantage over others. The Commerce Clause was not intended to give Congress a general authority to equalize such conditions." *Id.* at 273.

179. *ESSAYS*, *supra* note 173, at 404; *see also* 3 *THE RECORDS*, *supra* note 9, at 542.

180. Madison referred to both of these examples in a letter he wrote almost fifty years after the drafting of the Constitution. *See* 3 *THE RECORDS*, *supra* note 9, at 542 ("The other source of dissatisfaction was the peculiar situation of some of the States, which having no convenient ports for foreign commerce, were subject to be taxed by their neighbors, thro whose ports, their commerce was carried on. New Jersey, placed between Phila. & N. York, was likened to a Cask tapped at both ends; and N. Carolina between Virga. & S. Carolina to a patient bleeding at both Arms."); *see also* Kitch, *supra* note 76, at 14.

181. *THE FEDERALIST* No. 42, at 282 (James Madison) (Carl Van Doren ed., 1945); *see also* *PAMPHLETS*, *supra* note 6, at 62-63; *ESSAYS*, *supra* note 173, at 404; 3 *THE RECORDS*, *supra* note 9 at 542 (Madison memoranda); 3 *id.* at 519 (letter from James Madison to Professor Davis).

In addition to the market power exercised by states with natural harbors, the states under the Articles were also subject to monopoly power exercised by some states in the market for certain agricultural commodities. Many staples were produced only in highly localized areas. Under such conditions, states were able to levy heavy excise taxes which would be paid by out-of-state consumers.¹⁸²

The ability of some states to export taxes placed the states in a prisoner's dilemma, in which internalization of costs would raise the wealth of the states collectively. Some individual states, such as New York, would likely be made worse off by forced internalization of costs,¹⁸³ and with respect to these the appropriate model is the modified prisoner's dilemma.

States under the Articles had one final method of tax exportation at their disposal, and that was the levying of protective tariffs. Many states raised such tariffs in order to protect their infant industries from competition from established industries in other states.¹⁸⁴ These tariffs, and the retaliation which they provoked, were a source of

182. The states found themselves in a position analogous to that of Montana with respect to low-sulphur coal, discussed *supra* in text accompanying note 73. Concededly, this type of geographical monopoly was not nearly as common as that involving control of a harbor, and there is not as much evidence that the states took advantage of excise taxes as often as they did of imposts. Furthermore, the possession of agricultural monopolies was in reality a short-term position, as the localization of the growth of many staples was due more to local preferences and experience than to real environmental differences. Nonetheless, some states did levy heavy excise taxes on locally grown goods.

183. Several of the framers accused New York of opposing the Constitution for precisely this reason. See ESSAYS, *supra* note 173, at 176 (Ellsworth); 3 THE RECORDS, *supra* note 9, at 474 (letter from Madison to Thomas Cooper); 3 *id.* at 116 (Pinckney's Observations on the Plan of Government).

184. Because the wealth effects of tariffs are so complex, and because a state's ability to export costs through the use of tariffs depends on so many factors, it is impossible to determine *a priori* the extent to which these tariffs were inefficient. For a discussion of some of the effects, see Collins, *supra* note 11, at 74. The welfare effects of protective tariffs can be generally divided into wealth transfers and deadweight losses. Wealth is transferred from out-of-state producers and in-state consumers to in-state producers. There is a deadweight loss to society represented by the in-state consumers who can no longer afford to purchase the good at the higher price, and by the misallocation of the resources within the state that get devoted to production of the good, resources which presumably would be better spent elsewhere.

A state's ability to export costs through the use of tariffs, like its ability to export costs through imposts, will depend on its ability to discriminate against outsiders. This will depend in turn on the ratio of the various costs to one another, which will in turn be a function of the supply and demand curves for the good in question. For example, if demand for the good is relatively elastic, while supply is relatively inelastic, a tariff will result in the imposition of high costs upon consumers and out-of-state producers without resulting in an appreciable gain to in-state producers. If, on the other hand, demand for the good is relatively inelastic, while supply is relatively elastic, a tariff will result in substantial gains to in-state producers.

Finally, it must be noted that, under certain conditions, protective tariffs might be efficient. Such is the case, for example, when the goal of the tariff is the encouragement of infant industry. See V. CURZON, THE ESSENTIALS OF ECONOMIC INTEGRATION 197-225 (1974); ROBERT E. BALDWIN, NONTARIFF DISTORTIONS OF NATIONAL TRADE 125-30 (1970).

constant tension among the states.¹⁸⁵

Alexander Hamilton demonstrated an understanding of the prisoner's dilemma aspects of the situation. He predicted that, in the absence of federal regulation, the unbridled spirit of enterprise that characterizes America would not

pay much respect to those regulations of trade by which particular States might endeavor to secure exclusive benefits to their own citizens. The infractions of these regulations, on one side, the efforts to prevent and repel them, on the other, would naturally lead to outrages, and these to reprisals and wars.¹⁸⁶

On the other hand, he observed, an "unrestrained intercourse between the States themselves will advance the trade of each by an interchange of their respective productions."¹⁸⁷

In sum, the problems that plagued the states under the Articles of Confederation — want of national public goods, inability to discriminate against British shipping, interstate exploitation, and economic balkanization — can all be explained in terms of externalities and the prisoner's dilemma. The framers were aware of the nature of these problems, and they realized that federal regulation provided the only solution.

B. The Constitutional Convention

As a result of the problems under the Articles of Confederation, and after an aborted attempt to arrive at interstate commercial agreements in Annapolis in September of 1786, Alexander Hamilton and James Madison called for a convention to be held in Philadelphia in May of 1787 "to render the constitution of the Federal Government adequate to the exigencies of the Union."¹⁸⁸

Hamilton from New York, Randolph from Virginia, Paterson from New Jersey, and Pinckney from South Carolina all arrived at the convention with proposals.¹⁸⁹ The Randolph, or Virginia, plan, in the drafting of which Madison is said to have had considerable input,¹⁹⁰ became the foundation of much of the debate.

185. Madison, for example, wrote that it was necessary to remove "existing & injurious retaliations among the States." 2 THE RECORDS, *supra* note 9, at 451.

186. THE FEDERALIST NO. 7, at 37 (Alexander Hamilton) (Carl Van Doren ed., 1945).

187. THE FEDERALIST NO. 11, at 68 (Alexander Hamilton) (Carl Van Doren ed., 1945).

188. KELLY ET AL., *supra* note 152, at 87.

189. See Albert S. Abel, *The Commerce Clause in the Constitutional Convention and in Contemporary Comment*, 25 MINN. L. REV. 432, 433 (1941).

190. *Id.* at 433.

Randolph prefaced his presentation to the convention with an enumeration of the defects of the Articles of Confederation. Apart from Congress's inability to wage war or to exercise any power over the states, Randolph noted that there were two main defects with the confederation. First, Congress was incapable of securing interstate harmony;¹⁹¹ and second, it was incapable of providing certain collective goods.¹⁹²

Randolph then proceeded to present his proposal, consisting of a number of resolutions. The sixth resolution provided:

[T]he national legislature ought to be empowered to enjoy the legislative rights vested in Congress by the confederation and moreover to legislate in all cases to which the separate states are incompetent, or in which the harmony of the United States may be interrupted by the exercise of individual legislation; to negative all laws passed by the several states contravening in the opinion of the national legislature the articles of Union; and to call forth the force of the Union agst. any member of the Union failing to fulfill its duty under the articles thereof.¹⁹³

On May 29, the convention, dissolved into the committee of the whole, began to consider Randolph's proposals.¹⁹⁴ The goal at this stage was to determine which of the resolutions would be placed on the agenda for more serious consideration later.¹⁹⁵ On May 31, the committee of the whole considered Randolph's sixth resolution.¹⁹⁶ Pinckney and Rutledge expressed reservations concerning the vagueness of the language, to which Randolph responded that the proposal was meant merely as a basis for further discussion, and that it was his design that the resolution be eventually reduced to a list of enumerated powers.¹⁹⁷

Of the ten states then represented at the convention, all voted in favor of retaining the resolution as a basis for future action except

191. See 1 THE RECORDS, *supra* note 9, at 19 (notes of Madison) (noting that the federal government could not "check the quarrels between states"); *id.* at 24, 25 (notes of McHenry) (noting that the confederation did not "secure harmony to the States").

192. See *id.* at 18 (notes of Madison) (noting that the federal government ought to be able "to p[ro]cure to the several States various blessings, of which an isolated situation was i[n]capable"); *id.* at 19 (notes of Madison) (noting that "there were many advantages, which the U.S. might acquire, which were not attainable under the confederation — such as a productive impost-counteraction of the commercial regulations of other nations — pushing of commerce ad libitum — &c. &c."); *id.* at 24-26 (notes of McHenry) (noting that the confederation was "incapable of producing certain blessings to the States", including "the establishment of great national works — the improvement of inland navigation — agriculture — manufactures -- a freer intercourse among citizens").

193. *Id.* at 21 (notes of Madison).

194. See Abel, *supra* note 189, at 436.

195. *Id.*

196. 1 THE RECORDS, *supra* note 9, at 47 (Journal).

197. *Id.* at 53 (notes of Madison). Butler and Sherman also expressed a desire for further definition, although Sherman recognized the preliminary nature of the proposal. *Id.* (notes of Madison); *id.* at 60 (notes of Pierce).

Connecticut, whose vote was divided.¹⁹⁸ On June 13, when the Committee reported the Virginia plan to the convention, Randolph's sixth resolution remained virtually unchanged.¹⁹⁹

The enumeration of specific heads of power, falling under the classification contained in the Randolph plan, was the task of the Committee of Detail. It was apparently universally acknowledged within the committee that one of the powers falling under the general classification was that over foreign and internal commerce.²⁰⁰ The Committee of Detail presented its plan to the convention on August 6. When the convention arrived at the portion of the Committee's draft that gave the federal government power to regulate "commerce with foreign nations, and among the several States,"²⁰¹ the provision was accepted without debate.²⁰²

There were, in addition to the Randolph plan, several alternate proposals. One such plan was that of Hamilton. Hamilton's plan provided, in part, that "the Legislature of the United States shall have power to pass all laws which they shall judge necessary to the common defence and general welfare of the Union."²⁰³ This plan was apparently never presented for consideration.²⁰⁴

A second alternative was the Pinckney plan. Although the text of this plan has been lost,²⁰⁵ it is generally believed²⁰⁶ that the plan provided, in part, that Congress should have "the exclusive power, of regulating the trade of the several states as well with foreign nations as with each other — of levying duties upon imports and exports."²⁰⁷ The Pinckney plan was presented immediately following Randolph's presentation on May 29, and was never considered thereafter.²⁰⁸ It is presumed to have been considered moot after the preliminary approval of Randolph's plan.²⁰⁹

198. *Id.* at 47 (Journal); *id.* at 54 (notes of Madison). Within the Connecticut delegation, Ellsworth voted for the proposal, while Sherman voted against it. *Id.*

199. *Id.* at 225 (Journal); *id.* at 236 (notes of Madison).

200. *See, e.g.,* 4 *id.* at 23 (notes of Martin).

201. 2 *id.* at 308 (notes of Madison); *id.* at 304.

202. *Id.* The provision adding to the list the power to regulate commerce with the Indian tribes was also adopted unanimously. *Id.* at 499 (notes of Madison); *id.* at 495 (Journal); *id.* at 503 (notes of McHenry).

203. 3 *id.* at 627.

204. Abel, *supra* note 189, at 433.

205. *Id.* at 434.

206. *See, e.g., id.*

207. 3 THE RECORDS, *supra* note 9, at 607.

208. Abel, *supra* note 189, at 436 n.16.

209. *Id.*

Elements of Pinckney's plan, however, appear to have been incorporated into a third alternative.²¹⁰ On June 15, Paterson of New Jersey presented to the convention a plan drafted by members of his state's delegation, together with delegates from several other states.²¹¹ The plan provided, in part,

that the United States in Congress be also authorized to pass acts for the regulation of trade as well with foreign nations as with each other, and for laying such prohibitions, and such imposts and duties upon imports as may be necessary for the purpose; provided, that the legislatures of the several states shall not be restrained from laying embargoes in time of scarcity; and provided further that such imports [sic] and duties so far forth as the same shall exceed . . . per centum ad valorem in the imports shall accrue to the use of the state in which the same shall be collected.²¹²

The convention spent a week considering whether there were aspects of the New Jersey plan which merited further consideration, and ultimately rejected the plan in its entirety.²¹³

A fourth alternative was presented by Sherman of Connecticut on July 17.²¹⁴ Sherman proposed that Randolph's sixth resolution be replaced with one that empowered Congress to

make laws binding on the people of the United States in all cases which may concern the common interests of the Union; but not to interfere with the government of the individual states in any matters of internal police which respect the government of such states only, and wherein the general welfare of the United States is not concerned.²¹⁵

Sherman's substitute was eventually defeated by a vote of eight states to two.²¹⁶

A final alternative was submitted by Bedford. Bedford's proposal empowered Congress to legislate "in all cases for the general interests of the Union, and also in those to which the states are separately incompetent, or in which the harmony of the United States may be interrupted by the exercise of individual legislation."²¹⁷ This provision, little more than a refinement of Randolph's sixth resolution, was referred to the Committee of Detail by a vote of eight states to two.²¹⁸

The framers' reactions to these alternatives is enlightening. In particular, one might wonder why the Pinckney and Paterson plans were rejected, when they contained language so similar to that ultimately adopted. The rejection of these two proposals, together with the

210. *Id.*

211. *See id.* at 437; 1 THE RECORDS, *supra* note 9, at 243 (notes of Madison).

212. 3 THE RECORDS, *supra* note 9, at 612.

213. Abel, *supra* note 189, at 437.

214. 2 THE RECORDS, *supra* note 9, at 25-26 (notes of Madison); *id.* at 21 (Journal).

215. *Id.*

216. *Id.*

217. *Id.* at 26 (notes of Madison).

218. *Id.*

adoption of the Randolph and Bedford proposals and subsequent reduction of them to specific heads of power, indicates that the framers wanted the ultimate product to incorporate both the idea of a classification of the area over which the federal power was to extend and the idea of specifically enumerated powers.

The rejection of the Hamilton and Sherman proposals further refines this insight by indicating that the class of objects over which the framers intended to give the federal government power was precisely that set forth in the Randolph and Bedford plans: "all cases to which the separate states are incompetent, or in which the harmony of the United States may be interrupted by the exercise of individual legislation."²¹⁹

One commentator has observed that

[t]he evident purpose [of the framers] was to give power over . . . a class of subjects, whose members remained to be specified but which possessed the common characteristic referred to in the resolution as it went to the committee of detail: that is to say, where the general interests of the union were concerned, where the individual states lacked the capacity for effective action, or where state legislation constituted an appreciable interference with the conditions making for good relations between [sic] the several states.²²⁰

It is apparent, from the framers' evident understanding of the problems under the Articles, from the language of the Randolph and Bedford plans, and from the statements made in the conventions, that the primary concern was the prohibition of certain types of state action and not an affirmative grant of power to Congress.²²¹ Madison, for instance, wrote that "the best guard against an abuse of power of the States on this subject, was the right in the Genl. Government to regulate trade between State and State."²²²

By far the most illustrative piece of text on this point is contained in a letter that Madison wrote more than forty years later. The federal power over interstate commerce, he wrote, "grew out of the abuse of the power by the importing States in taxing the non-importing, and was intended as a negative and preventive provision against injustice among the States themselves, rather than as a power to be

219. See *supra* text accompanying note 193.

220. Abel, *supra* note 189, at 440. This sentiment is confirmed by the ratification debates. James Wilson stated in the Pennsylvania ratification convention that "[w]hatever object of government is confined in its operation and effect, *within the bounds* of a particular State, should be considered as belonging to the government of that State; whatever the object of government extends, in its operation, *beyond the bounds* of a particular State, should be considered as belonging to the government of the United States." See BERGER, *supra* note 11, at 169-70.

221. See Regan, *supra* note 11, at 1125; Abel, *supra* note 189, at 481-94.

222. 2 THE RECORDS, *supra* note 9, at 588-89.

used for the positive purposes of the General Government.”²²³

A comment by Roger Sherman provides similar insights into the extent to which the framers were concerned with the two goals of prohibition of state power and authorization of federal power. Sherman wrote that the main functions of the federal government would include the duties “to preserve . . . a beneficial intercourse among [the states], and to regulate and protect our commerce with foreign nations.”²²⁴ Several commentators have noted that Sherman’s distinction between the federal government’s role in interstate commerce — preservation — and its role in foreign commerce — regulation and protection — implies that the two functions were not seen in the same light, and that the grant of power over interstate commerce was intended more as a negative upon the states than as an affirmative grant of power to Congress.²²⁵

The purposes for which the federal government was given power over interstate commerce cannot be forgotten. It is an established rule of construction that statutes are to be considered in light of the evils they were designed to remedy.²²⁶ Madison stressed this when, during ratification, he wrote that, “[i]n expounding the Constitution and deducing the intention of its framers, it should never be forgotten, that the great object of the Convention was to provide, by a new Constitution, a remedy for the defects of the existing one.”²²⁷ Courts have universally accepted this principle.²²⁸ Justice Marshall, writing of the commerce clause in *Gibbons v. Ogden*,²²⁹ wrote that, if

there should be serious doubts respecting the extent of any given power, it is a well settled rule, that the objects for which it was given . . . should have great influence in the construction We know of no rule for construing the extent of such powers, other than is given by the language . . . which confers them, taken in connection with the purposes for which they were

223. 3 *id.* at 478. This letter has been the source of endless debate. See, e.g., BERGER, *supra* note 11, at 139; EDWARD S. CORWIN, *THE COMMERCE POWER VERSUS STATES RIGHTS* 25 (1936).

224. ESSAYS, *supra* note 173, at 238 (Sherman).

225. See, e.g., Abel, *supra* note 189, at 473. But see CORWIN, *supra* note 223, at ix.

226. BERGER, *supra* note 11, at 128 (noting that, “[a]ccording to a centuries-old rule of interpretation, an enactment is to be construed in light of the evil it was designed to remedy”).

227. Letter from James Madison to Professor Davis, 3 *THE RECORDS*, *supra* note 9, at 520; see also BERGER, *supra* note 11, at 128 n.36.

228. See, e.g., *The Slaughter-House Cases*, 83 U.S. 36, 72 (1873) (stating that in construing the Reconstruction Amendments, “it is necessary to look to . . . the evil which they were designed to remedy”); *United States v. Champlin Refg. Co.*, 341 U.S. 290, 297 (1951) (noting that a statute “cannot be divorced from the circumstances existing at the time it was passed, and from the evils which Congress sought to correct and prevent”); *Cawley v. United States*, 272 F.2d 443, 445 (2d Cir. 1959) (Learned Hand, J.) (noting that the “purpose of a statutory provision is the best test of the meaning of the words chosen”).

229. 22 U.S. 1 (1824).

conferred.²³⁰

In sum, it is clear that the framers intended the federal government to have regulatory authority only in those instances where state regulation generated externalities. There is no reason that this understanding cannot be applied to federal enactments today.

V. OBJECTIONS TO THE THEORY

A. Overview

Many objections may be made to the theory presented in this paper. This section will present a number of them, concentrating on the one considered the most forceful — that the courts are incapable of employing the type of analysis that application of the theory would require. It is my goal to show that none of the objections considered here is valid. The argument that courts could not apply the theory is belied by their reliance on it in a related context for the past half-century.

It might be pointed out that the adoption of the theory advocated here would result in the reversal of nearly half a century of constitutional precedent. This observation is doubtless correct, although it is, I believe, of limited force. Precedent, particularly in the realm of constitutional jurisprudence, stands not on the strength of antiquity but on the strength of reason. Jurists throughout the years have recognized this principle,²³¹ and the Supreme Court has shown no hesitation to overrule constitutional precedents when the reasoning behind them has been shown to be flawed.²³² Indeed, the Court's

230. *Id.* at 188-89.

231. Over two centuries ago, Yates and Austin wrote that "[n]o degree of antiquity can give sanction to a usage bad in itself." *Leach v. Three of the Kings Messengers*, 19 How. St. Tr. 1027 (1765). Chief Justice Murray, also writing over two centuries ago, noted that "[p]recedent, though it be evidence of law, is not law in itself." *Jones v. Randall*, Lofft 383, 385 (1774). Charles Warren echoed this sentiment (though without ascription) when he wrote that "[h]owever the Court may interpret the Constitution, it is still the Constitution which is the law, and not the decision of the Court." 3 CHARLES WARREN, *THE SUPREME COURT IN UNITED STATES HISTORY* 470-71 (1922); see also CORWIN, *supra* note 223, at xi; BERGER, *supra* note 11, at 5. Likewise, Justice Douglas wrote that it is imperative that a judge "remembers above all that it is the Constitution that he swore to support and defend, not the gloss which his predecessors may have put upon it." William O. Douglas, *Stare Decisis*, 49 COLUM. L. REV. 735, 736 (1949). Finally, Justice Frankfurter wrote that "the ultimate touchstone of constitutionality is the Constitution itself and not what we have said about it." *Graves v. New York ex rel. O'Keefe*, 306 U.S. 466, 491-92 (1939) (Frankfurter, J., concurring).

232. *Erie R.R. v. Tompkins*, 304 U.S. 64 (1938), for example, overruled nearly a century of precedent established by *Swift v. Tyson*, 41 U.S. 1 (1842).

decision not to enforce federalism-based limits on congressional authority was itself a reversal of existing law.²³³

It could be argued that, while there might be no theoretical objection to the adoption of the theory proposed here, the practical possibility of such an event is remote. This suggestion is, I think, belied by the refusal of four members of the Court to join in its decision to reject the hopelessly unworkable *National League of Cities*²³⁴ test.²³⁵ The likelihood of the Court's reversing itself once again on this point is substantially increased by the addition to the Court in the intervening seven years of four generally conservative Justices²³⁶ and by the appearance each year of numerous cases presenting the question.

It might be objected that this theory represents yet another attempt to constitutionalize the doctrine of *laissez-faire*, an endeavor that has been scorned ever since Justice Holmes, dissenting in *Lochner*,²³⁷ wrote that "a constitution is not intended to embody a particular economic theory, whether of paternalism and the organic relation of the citizen to the state or of *laissez-faire*."²³⁸

This criticism rests on a straw man. The theory proposed here, far from advocating *laissez-faire*, is based in part on the premise that every area of commerce should be susceptible of regulation by either the federal government or the states. It is that principle that enables one to draw the conclusion that, once the framers had decided to deny to the states regulatory power over a part of commerce, they simultaneously granted jurisdiction over that part to the federal government. There can be, under this theory, no regulatory void.

233. The Court has often enforced such limits. See, e.g., *Schechter Poultry Corp. v. United States*, 295 U.S. 495 (1936); see also CONSTITUTIONAL LAW 210 (Geoffrey R. Stone et al. eds., 1986) ("Over its history the Court has sporadically attempted to enforce federalism-based limitations on Congress's power. It has repeatedly abandoned those efforts after a time, only to revive them a while later.").

234. *National League of Cities v. Usery*, 426 U.S. 833 (1976).

235. Indeed, the Justices who dissented in *Garcia* themselves suggested the possibility that the Court could not long avoid its responsibility to enforce the Constitution. *Garcia v. San Antonio Metro. Transit Auth.*, 469 U.S. 528, 580 (1985) (Rehnquist, J., dissenting); *id.* at 584 (O'Connor, J., dissenting); see also CONSTITUTIONAL LAW, *supra* note 233, at 209 (noting that the dissenters suggested that "the Court will eventually return to the effort to develop judicially enforced federalist limitations on Congress's power").

Additionally, that four Justices were willing to dig in their heels and fight for the *National League of Cities* test, which the majority accurately described as "unsound in principle and unworkable in practice," suggests that, given a workable test, the Court may wish to reconsider. For additional criticisms of *NLC*, see Sotirios A. Barber, *National League of Cities v. Usery: New Meaning for the Tenth Amendment?*, 1976 SUP. CT. REV. 161; Dean Alfange, Jr., *Congressional Regulation of the "States Qua States": From National League of Cities to EEOC v. Wyoming*, 1983 SUP. CT. REV. 215.

236. Justices Scalia, Kennedy, Souter, and Thomas might well be more receptive to judicially enforced federalism-based limits on congressional authority than were their predecessors.

237. *Lochner v. New York*, 198 U.S. 45 (1905).

238. *Id.* at 75 (Holmes, J., dissenting).

A related objection to the theory advocated here is that it depends, fatally, on the ability of courts successfully to apply economic analysis. This objection has a good deal of bite. Indeed, Richard Posner, one of the staunchest advocates of the use of economic analysis in law, has expressed grave doubts about the judiciary's capacity for putting his theories into practice.²³⁹ Similarly, another commentator has noted that "[e]ven expert economists might find themselves hard put" to make a determination of the incidence of the costs and benefits of many state statutes.²⁴⁰

It must be pointed out, however, that courts have been properly applying the specific type of economic reasoning described in this paper for many years in the context of dormant commerce clause cases.²⁴¹ Indeed, analysis of federal commerce power is in a sense an ideal place explicitly to adopt economic principles, because the necessary doctrines have already been developed in another area of the law. The next section sets forth one doctrine utilized by courts analyzing dormant commerce clause cases and illustrates the manner in which the doctrine can be applied to analysis of the federal commerce power.

B. The Logic of the Dormant Commerce Clause

The proposition advanced in this paper — that the federal government ought to be able to regulate only where state regulation would generate externalities — is simply an economic restatement of a process-based theory that is well known to courts.²⁴² Although several versions of the representation-reinforcement theory have been advanced, the essence of the theory remains unchanged: state legislation that imposes costs on those not represented in the political

239. Posner, *supra* note 48, at 24, 31.

240. Michael E. Smith, *State Discriminations Against Interstate Commerce*, 74 CAL. L. REV. 1203, 1211 (1986). The Supreme Court has voiced similar reservations. In *Reeves, Inc. v. Stake*, 447 U.S. 429 (1980), the Court observed that "the competing considerations in cases involving state proprietary action often will be subtle, complex, politically charged, and difficult to assess under traditional Commerce Clause analysis [T]he adjustment of interests in this context is a task better suited for Congress than this Court." *Id.* at 439.

241. *But see* Stewart, *supra* note 135, at 1269 (suggesting that judicial invalidation of federal statutes is somehow qualitatively distinguishable from judicial invalidation of state statutes).

242. See JOHN H. ELY, *DEMOCRACY AND DISTRUST: A THEORY OF JUDICIAL REVIEW* 103 (1980) (noting that representation-reinforcing theories concern themselves with the proper functioning of the political "market"); Lea Brilmayer, *Shaping and Sharing in Democratic Theory: Towards a Political Philosophy of Interstate Equality*, 15 FLA. ST. U. L. REV. 389, 399 (1987).

process will be subject to strict scrutiny.²⁴³

The earliest well-known judicial exposition of a process-based theory²⁴⁴ of judicial review was contained in Chief Justice Marshall's opinion in *McCulloch v. Maryland*,²⁴⁵ where the Court ruled that the states were without the power to tax the federal bank. Chief Justice Marshall wrote:

In imposing a tax the legislature acts upon its constituents. This is in general a sufficient security against erroneous and oppressive taxation.

The people of a State, therefore, give to their government a right of taxing themselves and their property, . . . resting confidently on the interest of the legislator, and on the influence of the constituents over their representative, to guard them against its abuse. But the means employed by the government of the Union [in this case, the federal bank] have no such security, nor is the right of a State to tax them sustained by the same theory.²⁴⁶

This torch was taken up by Justice Harlan Stone in the 1930s and 1940s. In footnote 4 in *United States v. Carolene Products Co.*,²⁴⁷ Justice Stone suggested in *dicta* that it might be appropriate for the Court to subject to more exacting scrutiny legislation which "restricts those political processes which can ordinarily be expected to bring about repeal of undesirable legislation."²⁴⁸

The leading modern exposition of the theory is contained in Jon Hart Ely's *Democracy and Distrust*.²⁴⁹ In that work, Dean Ely develops a comprehensive process-based theory of judicial review. According to Dean Ely, the task of courts is to intervene only when the political process has been "unduly constricted."²⁵⁰ When the process is functioning properly, we can count on the self-interest of elected representatives to ensure the passage of reasonable legislation.²⁵¹

Thus far, representation-reinforcement has been presented only as a general goal of judicial review, and the theory has not been cast in explicitly economic terms. The theory can, however, be phrased in purely economic terms. Once this is done, the special relevance of the theory to dormant commerce clause cases²⁵² becomes apparent.

243. The theory is phrased solely in terms of costs, because states obviously need not be disabled from conferring benefits on unrepresented interests.

244. See CONSTITUTIONAL LAW, *supra* note 233, at 61 (noting that *McCulloch v. Maryland*, 17 U.S. 316 (1819), could be seen as the foundation of the theory).

245. 17 U.S. 316 (1819).

246. *Id.* at 427.

247. 304 U.S. 144 (1938).

248. *Id.* at 152 n.4.

249. *Supra* note 242.

250. *Id.* at 77.

251. Another prominent supporter of such a process-based theory of representation was Alexander Bickel. See ALEXANDER M. BICKEL, *THE SUPREME COURT AND THE IDEA OF PROGRESS* (1970).

252. At the outset, it should be observed that the term "dormant commerce clause" does not capture its intended meaning very well. The phrase is a contraction of Chief Justice Marshall's statement in *Willson v. Black Bird Creek Marsh Co.*, 27 U.S. 245, 252 (1829), that the state legislation at issue was not repugnant to Congress's power

In these cases, the relevant question is obviously whether the political process has resulted in the imposition of economic costs on interests that are by definition unrepresented — those of out-of-state citizens.

Justice Stone was the first to apply this reasoning to a dormant commerce clause case. In *South Carolina State Highway Department v. Barnwell Bros.*,²⁵³ the Court examined a South Carolina law prohibiting the use on state highways of trucks that were over 90 inches wide or that had a gross weight of over 20,000 pounds. In striking down the statute, Justice Stone based his decision on the theory of representation-reinforcement:

State regulations affecting interstate commerce, whose purpose or effect is to gain for those within the state an advantage at the expense of those without, or to burden those out of the state without any corresponding advantage to those within, have been thought to impinge upon the constitutional prohibition even though Congress has not acted.

Underlying the stated rule has been the thought, often expressed in judicial opinion, that when the regulation is of such a character that its burden falls principally upon those without the state, legislative action is not likely to be subjected to those political restraints which are normally exerted on legislation where it affects adversely some interests within the state.²⁵⁴

Justice Stone's theory continues to dominate dormant commerce clause cases. Three recent cases, all decided in 1978, are illustrative. One such case was *City of Philadelphia v. New Jersey*.²⁵⁵ In that case, the Court, speaking through Justice Stewart, struck down a New Jersey law prohibiting the importation of most garbage. Justice Stewart observed that the statute imposed upon out-of-state interests "the full burden of conserving the state's remaining landfill space."²⁵⁶

to regulate commerce in its dormant state. What is "dormant," then, is neither "commerce," nor "clause," nor even "Congress." It is Congress's power, which has not yet been made use of. The term "dormant commerce clause" has nonetheless become a useful shorthand for a somewhat nebulous concept, and so the established practice of misquoting Chief Justice Marshall will be practiced in this paper.

253. 303 U.S. 177 (1938). For Justice Stone's exposition of the theory as extended into the realm of interjurisdictional taxing powers, see *Helvering v. Gerhart*, 304 U.S. 405, 412 (1938).

254. *Barnwell Bros.*, 303 U.S. at 184, 185 n.2 (citations omitted).

255. 437 U.S. 617 (1978).

256. *Id.* at 628. It was, in fact, not the case that the costs imposed by the statute fell entirely on out-of-state waste generators. The apportionment of the costs created by the statute was a function of the elasticity of demand for waste-disposal sites and of the competing uses to which could be put the land used for such sites. Indeed, Justice Stewart's characterization of the incidence of the costs of the legislation was belied by the fact that the action challenging the statute was brought by local landfill operators. *Id.* at 619; see CONSTITUTIONAL LAW, *supra* note 233, at 268.

Another case was *Raymond Motor Transportation Corp. v. Rice*.²⁵⁷ In that case, the Court noted that the deference that it usually grants to state highway legislation

derives in part from the assumption that where such regulations do not discriminate on their face against interstate commerce, their burden usually falls on local economic interests as well as other States' economic interests, thus insuring that a State's own political processes will serve as a check against unduly burdensome regulations.²⁵⁸

Finally, in *Exxon Corp. v. Governor of Maryland*,²⁵⁹ the Court upheld a state statute prohibiting the operation of retail service stations within the state by producers or refiners of petroleum products. Both Justice Stevens, writing for the Court, and Justice Blackmun, dissenting in part, phrased the inquiry in terms of disproportionate burdens on out-of-state interests. Justice Blackmun wrote,

[W]hen the burden is significant, when it falls on the most numerous and effective group of out-of-state competitors, when a similar burden does not fall on the class of protected in-state businessmen, and when the State cannot justify the resulting disparity by showing that its legislative interests cannot be vindicated by more evenhanded regulation, unconstitutional discrimination exists.²⁶⁰

In this short passage, Justice Blackmun displayed a thorough understanding of some of the more subtle aspects of the theory. His reference to the numerosity and effectiveness of the burdened out-of-state interests, for example, seems to indicate that the Court should consider how successful the out-of-state interests would have been in preventing passage of the legislation had they been represented within the state. The implication, apparently, is that, if the out-of-state interests would not have been able to forestall the regulation even if they had been given a voice in the representative process, the burden might not be discriminatory.²⁶¹

Justice Blackmun appears to be aware of another wrinkle in the theory, which is that legislation that burdens out-of-state interests may nonetheless pass muster under the test if it also burdens a similarly situated group of in-state interests. In such a case, it can be expected that the in-state interests will put up a fight on behalf of their out-of-state counterparts.²⁶² Dean Ely has characterized this

257. 434 U.S. 429 (1978).

258. *Id.* at 444 n.18.

259. 437 U.S. 117 (1978).

260. *Id.* at 148 (Blackmun, J., dissenting).

261. See generally J. Q. WILSON, *THE POLITICS OF REGULATION* 366-70 (1980) (setting forth a taxonomy of the predicted redistributive effects of regulation depending on whether the costs and benefits are widely distributed or narrowly concentrated, and suggesting that legislation that confers widely distributed benefits but that imposes narrowly concentrated costs is not likely to be passed).

262. Justice Stone made this same point in *Barnwell Bros. South Carolina State Hwy. Dept. v. Barnwell Bros.*, 303 U.S. 177, 187 (1938). The theory is, of course, complicated by the observation that the additional weight thrown into the battle by the out-

wrinkle in the theory as a revival of the concept of "virtual representation,"²⁶³ meaning that out-of-state interests may effectively be represented by similarly burdened in-state interests.

The Court was given another opportunity to comment on the dormant commerce clause three years after the trio of cases in 1978. In *Kassel v. Consolidated Freightways Corp.*,²⁶⁴ the Court struck down an Iowa statute that prohibited the operation of most large trucks on state highways, but that allowed exceptions for trucks in shipment from in-state manufacturers, for mobile homes being delivered to or from locations within the state, for trucks hauling livestock, and for farm vehicles. Justice Powell, in a plurality opinion, observed that, because the exceptions effectively ensured that in-state interests were not particularly burdened by the statute, the usual assumption that such elements would look out for the interests of out-of-state interests was violated.²⁶⁵

The theory developed in these cases has been refined by Professors Tushnet and Eule. In *Rethinking the Dormant Commerce Clause*,²⁶⁶ Mark Tushnet proposes a political theory of judicial review, under which statutes are struck down only when the political process that created the statute operated "in a distorted way."²⁶⁷ When applied in the realm of dormant commerce clause analysis, Professor Tushnet's theory may be reduced to the proposition that state regulation ought to be overturned only when it imposes costs on those not represented in the state's legislature.²⁶⁸

Similarly, in *Laying the Dormant Commerce Clause to Rest*,²⁶⁹ Julian N. Eule suggests that the only justification for nullifying state

of-state interests might have been the decisive factor in the legislative contest. See also Regan, *supra* note 11, at 1162-63; Levmore, *supra* note 71, at 568 n.10.

263. ELY, *supra* note 242, at 83-84.

264. 450 U.S. 662 (1981).

265. *Id.* at 675-76 (Powell, J., plurality opinion).

266. 1979 WIS. L. REV. 125.

267. *Id.* at 125.

268. Professor Tushnet observed that his theory had been anticipated in several works, including Noel T. Dowling, *Interstate Commerce and State Power*, 27 VA. L. REV. 1 (1940); Herbert Wechsler, *The Political Safeguards of Federalism: The Role of the States in the Constitution and Selection of the National Government*, 54 COLUM. L. REV. 543 (1954); Jesse H. Choper, *The Scope of National Power Vis-à-Vis the States: The Dispensability of Judicial Review*, 86 YALE L. J. 1552 (1977); John H. Ely, *The Constitutionality of Reverse Discrimination*, 41 U. CHI. L. REV. 723 (1974). See Tushnet, *supra* note 266, at 128 n.14.

269. 91 YALE L.J. 425 (1982).

statutes is state "evisceration of the democratic process."²⁷⁰ Accordingly, Professor Eule proposes a theory of judicial review under which state statutes may be legitimately struck down only when they are the result of a process that was not functioning properly.²⁷¹ Specifically, Professor Eule suggests that state regulation ought to be struck down under the dormant commerce clause only when the regulation disproportionately burdens out-of-state interests.²⁷²

The implication of all of this is that courts have grown adept at analyzing state legislation that is claimed to burden out-of-state interests.²⁷³ In some of the cases, the incidence of the costs generated by the statute at issue was not obvious, and yet the courts seem to have arrived at the proper result. All that the theory here proposed would require is the application of this same reasoning to the affirmative scope of the federal power.²⁷⁴

Some qualifications are in order. First, judicial analysis of particular exercises of the federal commerce power could not be made to turn exclusively on whether the states left unregulated would impose costs on one another. It might be the case that the benefits of federal intervention in such cases would nonetheless be outweighed by the loss of some of the advantages discussed in Part I.²⁷⁵ For example, the positive external effects of locally-provided public education were noted above,²⁷⁶ yet it seems likely that the advantages of federal provision of education would be more than offset by the gross diseconomies of scale that such an endeavor would entail.

It must also be conceded that, since the courts need not prevent states from enacting legislation that has positive external effects, they have not developed an ability to analyze the necessity of federal intervention under these circumstances. Accordingly, courts reviewing federal legislation justified on these grounds would need to adapt the methods of analysis that have been developed in the economic literature.

270. *Id.* at 428.

271. *Id.* Professor Eule's ultimate conclusion is that the sort of analysis he proposes may be more appropriately undertaken in the context of the privileges and immunities clause. *Id.*

272. *Id.* at 460-85.

273. Professor Ely attributes this to the lawyer's knack for "insuring that everyone gets his or her fair say." ELY, *supra* note 242, at 102.

274. Once again, it must be noted that equating a prohibition on state action with authorization of federal action is not as radical a proposal as it might seem. Indeed, one view of dormant commerce clause cases suggests such an approach. Proponents of this view justify invalidation of state statutes on the ground that federal action is so obviously required in some cases that the courts may preempt state rules pending congressional action.

275. See *supra* notes 5-44 and accompanying text.

276. See *supra* note 134.

These qualifications should not prevent courts from reviewing federal legislation along the lines proposed here, although they do suggest that courts should tread lightly before striking down such legislation on the grounds that no justification for it exists. At the very least, it is not too much to expect that courts could invalidate some of the more egregious examples of federal overreaching, while endorsing legislation that can rationally be supported by some argument from economic necessity.

CONCLUSION

The study of economics of federalism has evolved into a well-developed body of theory. This theory has been successfully applied in the area of dormant commerce clause analysis, where it is used to determine what state actions unduly discriminate against interstate commerce. Curiously, however, the theory has not yet been applied to analysis of federal power under the commerce clause. This paper represents an attempt to do so.

The economics of federalism proceeds upon the principle that the states ought to be disabled from regulating in situations where state regulation would create external costs. This same theory can be applied to the federal government, yielding the proposition that the federal power ought to be construed so as to enable regulation of only those areas where state regulation would generate externalities. This conception of the federal power, as well as being suggested by economic reasoning, is also consistent with the intentions of the framers, whose goal it was to provide for federal regulation in only those situations in which "the separate States are incompetent, or in which the harmony of the United States may be interrupted by the exercise of individual Legislation"²⁷⁷

I have attempted in this paper to cover a great deal of ground. As a result, I have unfortunately been forced to race rapidly over terrain that merits closer inspection than I was able to devote. Part of the aim of this paper, therefore, is to stimulate discussion of the issues mentioned herein. It is hoped that others may pick up where I have

277. 1 THE RECORDS, *supra* note 9, at 21 (notes of Madison); *see supra* text accompanying note 193.

left off, giving the concepts described in this paper the thorough attention that they deserve. With any luck, a detailed and unified theory of the federal commerce power can be developed. Such a theory may well be the harpoon that entices the Supreme Court to return to the seas in search of Leviathan.